Professor Mohamed Dowidar
Faculty of Law
Alexandria University

Political Economy

A Social Science

Each science is defined by its object (its subject - matte and scope) and its method in their organic interaction. Their delimitation is realised historically through a proress during which the considered science is formed, thanks to the crystalisation of its object, the elaboration of its method and the formalisation of its content, that is, its theoretical content.

To this, political economy, the center of our interest, does not make an exception. To edify ourselves on this science, we have to consider its object and **methods** as they present themselves actually, i. e., in their present state, a state which is the result of a historical process during which they have been built up sometimes progressively and some others irruptively.

Consequently, this first part, aiming at introducting the Political Economy as a social science, will be presented in three chapters:

- the first shows the nature of the **knowledge** repreśenting the object of our studies : the ensemble of theories wich compose political economy as a science, by defining its object and its methods as they are today, and showing the relations which exist between our science and the

other branches of social sciences;

- the second gives a clear survey of the history of political economy, namely the process of the formation and the development of the knowledge subject of our studies; for, to understand better our subject, we must have an idea about its past development;
- from our study of the history of political economy, it will be clear to us that it is a science interested in the process of the production and the distribution of the social product, but under its different social forms. A notion which permits us to provide, in a third chapter, the different economic theories within their structural framework. This could be achieved by studying the concept of mode of production and the different types of modes of production.

Chapter One : Political economy as a science

The **etymological** origin of the term "political economy" is found in the three greek words:

oïkos, nomos and politikos, which mean, successively, house, law and social.

The two composants of the term were not used at the same point of time. First, the term "economy" comes from

Aristotle.[1] It indicates the science of the "laws of domestic economy" or the "laws of domestic patrimony". It was not before the begining of the 17th century that the expression "economie politique" enter in use in France. It is Antoine de Montchrétien[2] who introduces the expression in publishing, in 1615, a book with the title of "Traité de l'économie politique". The adjectif"**political**"was to indicate that it is a matter of the "laws of the economy of the State".[3] Since, the appelation "political economy" became spread to design a branch of theoretical knowledge which did not cease, since that historical moment, to develop. It is to this branch of knowledge that it is given actually, in the Anglo - Saxon world, the name of "economics".[4]

So much for the etymological origin of the term, what definition we could give, from the **epistemological** viewpoint, to the term political economy?

According to the definition which seems to us the most convenient, political economy is the science of laws governing the economic relations, i.e., the **social relation** which take place between the members (groups or classes) of the society **through the intermediary of material goods and services.** These are relations consistituting the process of production and distribution of goods and services necessary for (the material and cultural) life of the members of the society.

To render this definition more understandable and more complete, we need to :

- delimit, first, the object of political economy, e. i., the ensemble of observable phenomeno representing the object of investigation in the domain of economic research;
- elucidate, second, the methods of the formulation of the economic knowledge : the definable and regularly followed directions to attain the targets of the economic research;
- discern, finaly, the political economy from the other branches of social sciences.

That is what we will be undertaking, successively, in the three sections of this chapter.

Section one : The object of political economy

The object of political economy is the knowledge relative to the totality of phenomena which consititute the economic activity of Man in the society, i. e., the activity of the production and distribution of products and services necessary for the life of the members of the society. This activity presents itself in the form of a double relation : a relation between Man and Nature, and a relation between man and man.

I. The process of production as a relation Man - Nature :

From all the species, only man is opposed to nature. The other living beings make part of nature, subjugated to its forces. They live by what nature gives them and disappear if it ceases to do so and if they fail to adapt themselves to the new natural conditions. Contrary to that, man is opposed to nature. He does not depend on it without an action on it, i. e., an action having nature as object.

As a being opposed to nature, man has needs, wants which find their satisfaction not in himself but in nature; wants which puch him to act on the exterior world. These are oriented wants. They represent the source of all movement, of all the dynamism of man.

To satisfay these wants, man has to exercise an **effort**, in order to draw out of nature the means enabling him to attain such satisfaction. It is a matter of an action practiced by man on the forces of nature to master them : rendering them less natural and more human

The effort exercised by man distinguishes itself from the effort of other species by the fact that it is a **coscious effort** : it is **labour**. Because man is a thinking animal. He is conscious, first, of his opposition to nature. This consciousness manifests itself in labour. He does not take the

forces of nature as they are, but he labours them to make them apt to satisfy his wants. Man is also conscious while exercising his effort. He is the only animal who conceives in advance the result of his labour. Once the result is conceieved, he uses the appropriate means for its realisation. The result attained by labour preexists ideally in the imagination of the labourer.

A spider is capable of webing a cob - web which the cleverist of all weavers cannot realise. But, what distinguishes the effort of the spider from that of the weaver is that the first does it instinctively, without consciousness; that is, without conceiving, à priori, what it is realising. While the weaver imagines in advance the result he wants to achieve : a certain length of a cloth, having specific qualities with determined colours. Then, he follows the method appropriate to the realisation of such result : the provision of his effort, under the given conditions of production, by using a certain production technique (be it a handloom or a machine).

The same thing for the man who wants to build a house. He conceives in advance the aspect which the house would take : the pattern of partition of the surface into rooms, the dimensions of each room, how to guarantee for each the necessary lighting and aeration, the number of floors ... etc.

This conception of the result of the construction activity can be registered in the form of a construction plan or even

presented as a maquette. Once the objective is defined, he looks for the ensemble of means necessary for the construction of the house.

To satisfy these oreinted wants, man has, hence, to act on nature, to **labour**. He has to **produce** the means of his existence. The human fact par excellence is then the possibility, which belongs to man solely, to produce his means of existence. This, he does not do once and for all, but perpetually. This human activity is repeated permanently. It is, hence, a matter of a process of production, continually repeated over time.

To labour, man invents tools, **instruments of labour**, which are worked out objects of nature, taken from it and appropriated by man. These instruments of labour are used in production. By means of these instruments man augments the productivity of his labour, that is his productive faculties, and hence his mastery over the forces of nature. [9]

In improving the instruments of labour, man improves then his labour. It is here that we see how far man has made out of nature something of himself.

The process of production is, consequently, in its nature, a **relation between man and nature**, a relation of mutual interaction : man labours, that is exercises his conscious effort

over the forces of nature, using his instruments in order to transform these forces into something apt to satisfy his wants. In transforming nature, man transforms himself. He muliplies his possibilities and extends his horizons; in doing this he finds himself confronted with new forces of nature which he attempts to master for satisfying his wants, themselves in continous development along this process. Thus, the relation between man and nature provoques, permamently, mouvement and changes.

II. The process of production as a relation man - man:

But production is not only a relation man - nature, it is also a relation man - man. Because man does not live his struggle against nature singularly. He does it with the other men, socially. He cannot realise his being but through the labour of others. Men complete each other, mutually in the society. **The process of production is by its very nature a social process.** It is the process of social labour in its perpetual struggle having as objective to get out of nature what is necessary for the satisfaction of the needs of the community and its members. The labour of each for man the other takes the form of the **social division of labour,** which permits the individuals and the groups to specialise in particular activities. Labour, who essence is social, is divided necessarily.

Apart from the primitive social division of labour between the two sexes (according to which the woman is engaged in activities taking place in, or near to, the dwelling, while the man effecuates the activity necessitating moving far from the dwelling) which we can recognise in all the stages of economic development of the human society, the division of labour depends on the realisation of a certain level of development of the productives forces, i.e., a certain level of the productivity of labour, a level which permits the creation of an **economic surplus** - and specially in alimentary products - giving in this way to other members of the society the occasion of specialising themselves in other activities.(10)

Accordingly, it becomes clear that the process of production is, at the same time, a relation man - nature and a relation man - man. It is the ensemble of relations between the members of the society in their struggle against nature, relations which constitute the **economic relations, i. e., the social relations taking place through the intermediary of material products and services.**

III. The process of production : an over - all view and historical forms:

We can say that the **economic process** is the process of production and distribution (among the members of the

society) of the social product (i.e., the ensemble of the produced goods and services); this process having its essence in social labour, in the concious effort exercised by the society to get out of nature the products necessary for the satisfaction of wants, always in utilising the instruments of labour. The **final aim** of this process is, hence, the satisfaction of wants, material as well as cultural.

We can say, briefly, that the conditions of the production process, which is the axe and basis of all the economic activity, whatever the form of society in which this process takes place, are:

- the **labour force,** i.e., the ensemble of individuals and groups participating to the economic activity, having a technical knowledge acquired through social experience and accumulated from one generation to the other;
- **the instruments of labour,** which augment the capacities of the labour force (ex. the plough and the handloom);
- **the objects of labour,** i.e., the materials to be transformed by labour with the aid of the instruments of labour (ex. the thread and the electric energy in the production of textiles).

The last two ones, the instruments of labour and the objects of labour represent the **means of production**

From this, we see that the society utilises, in the economic process, the productive forces at its disposal. Usually, the economists call these forces the economic resources and divid them in three categories :

- **the human "resources",** represented by the labour force with its physical and intellectual capacities, its konwledge and its technical formation. These "resources" are usually designated by "Labour";
- **the natural resources,** represented by the gifts of nature which the society can use in its economic activity thanks to the level of scientific and technological knowledge acquired by the society with respect to each specific natural force; the pasturage, the forest, the soil, the sea, the climatic conditions, the favourable topographies, the organic and inorganic elements ... etc.;
- **the material resources,** represented by all what man produces to be used again in the process of reproduction : machines, buildings, roads, realways, raw materials. In a word, all what is produced but not destined to the satisfaction of final needs, i. e., **final consumption.**

These three categories are called by the economists, as already montioned, the "economic resources". We do not approve this "economistic vision" with respect to the

pretended "human resources", because it is the capitalist vision which considers labour as a simple **input** in the production **act** . For us, man is the principal actor and the main objective of social production. In this quality, he can not be considered as a "resource".

These are the conditions of the production process abstracting from the social form they assume, a process which aims, **finally,** at the satisfaction of the needs of the members of the society. But, if we push further our investigation, we perceive that the objective of the economic activity had not always been, during the different stages of the social development of this activity, the **immediate** satisfaction of the needs of those who produce. From this viewpoint, we distinguish two types of production known in the history of the economic activity : **subsistence (or natural) production and production for exchange, that is, exchange (or commodity) production.**

At a first stage in the history[11] of the economic activity, the production aimed at the immediate satisfaction of the needs of the producers within the productive unit (the family, the tribe or even a larger society). Like, for example, the agricultural production of a peasant family which produces only for the satisfaction of its proper needs. At this stage, production and the **product** - labour and its result - were

unseparable in both the reality and the consciousness of the producers. The producer lived on the products of his labour. The economic process, whose point of departure was provoked by the needs of the producers, is realised in the production of products and terminated by delivering them to be consumed by their proper producers.

At a later stage, with the possibility of the production of an **economic surplus,**(12) when the level of development of the productivity of labour permits the producers to produce, during a certain period, a quantity of products exceeding the quantity necessary, under their social and technical conditions, for their proper consumption, the basic condition of a clear cut division of labour is created, and with it the possibility that commodity production appears. It appears primetly when some individuals, engaged principaly in the agricultural activity, spend a part of their labourtime in the artisanal production (producing a tool to be used in the agricultural activity, for example). This gives rise, at a later stage, to the emergence of independent (thanks to the social establishment of the private property of means of production and, hence, of products) craftsman spending all their labour time in the production of artisanal products that could be exchanged for other products, especially the alimentary products (This is conditioned by the excistence of an agricultural surplus thanks

to which the craftsmen can live). At that moment, the producer starts to live not on the products of his labour but on the labour spent in the production of **commodoties,** i.e., products for the direct exchange (barter or truck), at a first stage, and through the intermediary of **money,** at a second stage. And, through exchange, the producer can secure other commodities-necessary, either for his consumption or for his reproduction.

Commodity production supposes, hence:

- a social division of labour;
- that production is effectuated by indpendent producers (thanks to the private property of means of production);
- that production aims at, at least partly, exchange;
- that the product, which became a commodity, is useful for the other members of the society, i.e., that it has a **social**(14) use - value.

Whatever may be the case, the process of production, whether it is a subsistence or a commodity production, has its conditions represented by the labour force having a certain technical formation and the means of production utilised by the labour force. This labour force acts in an atmosphere of technological knowledge demanding from it a technical knowledge and formation which correspond to the type and

level of the instruments which this labour force utilises, or more generally, to the level of development of means of production. This labour force, which acts in a defined technical milieu, with the means of production it is using, represent what we call, from a terminological viewpoint, **the productive forces** of the society. Further more, we have already seen that the process of production represents a collective struggle by the members of the society against nature. In this struggle, arise between them certain relations, designated as the **production relations.** They are social relations because they arise between the members of the society (or between its strata or classes). And, they are economic, since they are established through the intermediary of material goods, that is, through the means of production. These are the relations which determine the attitude of each individual (or strata or class) vis - à - vis the others with respect ot the means of production (having the control over these means or divorced from them), the role of each in the process of social labour and, finally, the share of each in the social product. These relations correspond, themselves too, to the level of development of the productive forces available in the society. Together, they constitute a **social form** of the process of production (and distribution) which characterises a determined stage of the development of the human society. In

other words, a certain level of development of the production forces is .combined dialectically with a certain type of relations of production to constitute a distinct social form of production which dominates in the society at one of its historical stage. It is this specific form which is called **mode of production.** The different modes of production in their relation to, the social formation will be the subject matter of a detail ed study in the third chapter of this first part. But, what is important here is to be conscious that the economic process (the process of production, of distrbution, through time) does not manifest itself in the same manner during the different historical stages of the development of the human society. It takes different social forms. In this way, we precise our definition of the economic process by talking about the different social forms of this process, forms which are determined by the dominant type of mode of production (from the viewpoint of the relations of production and the level of development of the productive forces) as well as the type of production, whether it is natural production or commodity production.

In defining the economic process, the process of the economic activity (activity of production) in its different social forms; in so doing, the object of the political economy as a science is defined. This object is found in the **ideas**

relative to social laws governing the ensemble of observable phenomena which constitute the economic activity in the society; an activity which takes the form of a process having a temporal dimension and reproducing itself from one period to the other: they are the economic laws, i.e., which are the continually repeated relations between the elements of the economic process; the socia laws relative to the production of products and the manner according to which these products find their way towards the members (strata or classes) of the society to be used in the satisfaction of their wants, material as well as cultural. This occurs under forms that differ from one state of social development to the other.

* * *

We have, thus, reached a definition of the object of political Economy. But, defining the object, though necessary, is not sufficient to define the science. We need, too, to learn about the **method** used in the research for the economic knowledge.

Section II : The method of Political Economy :

We mean by method, in all the branches of human knowledge, the steps followed by Reason in the study of a certain object in order to arrive at a **general law.** It is the art of organising the ideas in such a manner as to discover an

unknown truth or to prove the validity of a certain idea already known. The method is, hence, the ensemble of stages undertaken by thought with the objective of formulating knowledge. Here, it is a matter of a succession of stages, i.e., a road to be taken by our reason towards knwoledge. This road of thought does not represent a simple course, because it is associated with a **conceptual organisation.** That is the reason behind the fact that the method distinguishes itself by the nature of the concepts in question. From here comes the organic relation between the method and the object, that is the object of knowledge being an ensemble of concepts (for, although the scientific knowledge is related to reality - be it natural or social - it does not have as a starting point but the figurated representations of such reality).

Generally speaking, the method adopted into the acquisition of the economic knowledge does not differ from the method of the scientific research. We will know about such a method, hence, in talking about **Political Economy as a Science.** For, as it might have been noticed, we have been talking about political economy as the **science** of laws governing the economic process. Is it really a science?

To answer such question:

* we will show, first, the conditions that have to be satisfied in order to be able to talk about a science, and

it is here that we will have the occasion to know the method of the scientific research in general;

* we will see, successively, whether these conditions are realised with respect to Political Economy. If the answer is in the affirmative, we could talk about Political Economy as a science. A matter which we cannot do if the answer is in the negative form.

I. What is a science?

Referring to the philisophy of science and taking the term in general, we mean by "science" the ensemble of organised human knowledges about nature, society and thought, acquired thanks to the discovery of objective laws concerning the observable phenomena and their explanation, through the utilisation of the method of scientific research.

But, if we take a "science", that is one of the different branches of science, the term disgnates "the ensemble of organised knowledges relative to a certain category of facts or phenomena". What can we derive from these definitions ? That, to be able to talk about a science, it is necessary:

* first, to have a **theoretical body,** i.e., an ensemble of ideas, of theories, satisfying the requirements of the scientific knowledge, **relative to a well defined object**;
* it is equally necessary that this ensemble of theoretical

knowledge gives us the possibility to have **a minimum lot of elementary certainties;**

* it is necessary, finally, that this latter permits us, on its turn, **to explain** the envisaged phenomena and **predict** the general tendancies of their movement.

Let us see, more closely, each of these elements:

1 - It is necessary, first, to have a **body of scientific knwoledge.** Now, for the knowledge to be scientific by opposition to the ordinary knowledge, that is knowledge acquired through the day to day experience and fails when scientifically tested - three conditions have to be satisfied.

a - First, the **objective** of the theoretical activity (that is the activity of research) must be the discovery of **objective laws** to which the envisaged facts (phenomena) are subjected. With respect to social phenomena, the social process presents itself in the **totality of the individuals' and groups' activities** in their perpetual internaction and **continity** over time. In the given **circumstances** of the historical development of a certain society, these activities are repeated in a **particular manner** which becomes one of the characteristics of a **certain** stage of development of that given society. This particular

manner of the repeation of social activities gives them a certain **regularity.** Thanks to this regularity we can distinguish the **relations** repeating themselves, continuously, between the different actors in these activities[16], relations which imply that each action, or ensemble of actions, generates an effect which represents the result that manifests itself each time the conditions of its realisation are occuring. It is these relations which repeat themselves with continuity (some of them existing in more than[*] one social formation, while other are specific to a certain social formation)[17] what we call **social laws.** It is, hence, these relations between the different elements of the social process, repeating themselves continously in a specific manner which give the **totality** of social activity its **proper internal characteristics** reflected as a totality, with its **objective way of existing and functioning.** It is this which enables us to say that those laws have an **objective nature.**[18] They express the real (objective) characteristic of the social process. This objective nature of social laws is sometimes expressed by saying that social phenomena are subject to objective laws.[19]

b - Secondly, for knowledge to be scientific, it is

necessary to use, during the process of the formulation of **ideas,** the method of scientific research. The steps of this method are, briefly, as follows:

* The **systematic description and classification** of the phenomena envisaged. This operation, which is based on the collection of information and the **scientific observation and experimentation** on the object of our study, this operation represents the first demarche towards the comprehension of the group of phenomena under consideration. By scientific observation we mean the orientation of senses and thought towards the observable phenomena in order to discover its qualities and characteristics with the objective of acquiring new knowledges. The observation is made by the description of the phenomenon, by the delibrate observation of its march, constating the characteristics which help understanding its nature, the circumstantes to which its owes its existence and the results it might produce. As for the scientific experiment, it is more than the observation. It is a provoked observation. In the case of the observation, the research worker surveilles the phenomenon and register its state

without making it undergo any change. While in the case of the experiment the research worker observes the phenomenon under question under circumstances voluntarily arranged by him in order to realise his objectives in the process of the understanding of the phenomenon. Here, the research worker changes the circmstances so that the phenomenon presents itself under the conditions most appropriate to his study.[20]

* To draw up scientific laws and principles through the **investigation** of the object of analysis raised to a certain level of **abstraction** (the abstraction with its two demarches : from figurated concret to the abstract, and from the abstract to the concret - thought - out). It is **the method of investigation having an inductive deductive nature**[22], whose utilisation permits us to arrive at ideas or categories relative to the object of the scientific research, provided that it is analysed in its movement.

* The **construction of hypotheses** on the basis of these categories with the purpose of explaining the observed characters of the envisaged phenomenon as well as the relation between its elements (in thier movement): in order to deduce the other characters

which were not the object of the first observation. These hypotheses are founded on the observation and the experiment. They should not contradict the already established truth or the verified scientific laws. The research worker cannot construct his hypotheses but in making recourse to intution[23] and imagination, provided that it is possible to verify the validity of the hypothesis by the observation, the experiment and the reasoning.[24]

* **The verification** of the results drawn from the process of the formulation of knowledge, i. e., the verification, as far as possible, of the formulated ones before taking them as a basis for a guide to action. This verification is made first theoretically by ensuring the absence of contradiction between the different parties of the theory, and second, by confronting theory to reality.

c - Thridly, for knowledge to be scientific, it is necessary that the drawn up knowledge acquire **a certain precision** emanating from the knowledge of both the qualitative and the quantitative (mesurable) aspects of the phenomenon studied. For, quality and quantity are, through opposed, unseparable. It is a matter, effectively of two aspects of the examined phenomenon. A knowledge of the nature of the

phenomenon cannot permit itself to sacrify neither one nor the other. But the study of the quantitative aspects of the phenomenon is not possible but on the basis of a qualitative knowledge of it. For, this latter is necessary for the very determination, in thought, of the phenomenon whose quantitative aspects are to be known, since quality is the manner of being. It constitutes the essence whose continuity or repetition are the object of quantitative determination, a mesured determination. To neglect the quality does not constitute, as someones think, objectivity, it is rather, as K. Manuheim[25] says, the **negation** of the essential quality of our object.[26] On the other hand, to sacrify the quantitative aspects is to deprive our knowledge from the exactitude, indispensable for it if it is to become the efficient means of acting upon reality.[(26)] In science, measurmenet (that is the process of the determination of the extension of dimensions, the degree or the capacity : the quantitative aspects), we say that measurement is a central question.

These are the conditions that have to be satisfied collectively for knowledge to have a scientific nature.

The succes of any scientific research, in its attempt to discover the objective laws governing phenomena, is crystallised **in scientific (theoretical) laws having a**

general and **abstract character.** The difference between the objective laws of the phenomena and the scientific laws, in the case of social phenomena, is the difference between real phenomena and knowledge concerning them, that is the difference between reality and the sceintific theory. Scientific laws represent the reflection of the objective laws governing the pehnomena object to investigation. It is a matter of a reflection not in all the details of objective laws, but in what is essential in such relations. It is the reflection of objective laws at a certain level of theoretical abstraction. But, scientific laws are more than that, for they have to explain reality. And, to explain reality, science has to venture a penetration behind observed reality to arrive at the truth it is trying to explain, through the attribution of the observed reality to the **totality** complex out of which it is the **part.** In other words, to be able to explain a phenomenon, one has to go behnid it in order to reach the totality to which it belongs and of which it is the integrated part.

The ensemble of theoretical laws concerning particular phenomena (the economic phenomena, for instance) represents the science which have these phenomena as a subject - matter (i.e., as object)[27]. But, to be able to talk about this theoretical ensemble, as a science two other conditions have to be fulfilled.:

2 - To be able to talk about a science, it is necessary, secondly, to have to do with a **determined object.** The objects of the scientific knowledge in general are the **figurated representations** of the phenomena (the facts); natural, when it is a matter of the sciences of nature, and social when it is a matter of the social sciences. As the subject formulating knowledge is Man, we talk, when we are dealing with social phenomena, about the unity of the subject and the object.

3 - To be able to talk about a science, it is necessary, thirdly, to dispose of a minimum lot of elementary certainties which enables us to explain the phenomena in consideration and predict the general tendancies of their movement. Why understand and predict ? To act. But this belongs to action, to the policy we adopt in order to change reality. And here resides, in the last analysis, the function of science. It helps us to see, in the phenomena, the connections that were hidden to us before, to relate the effects to their causes, to replace the arbitrary and the accidental by the regular and the necessary. In one word, science helps us to understand the universe to act within it with intelligence and efficiency in order to change it.(28)

* * *

Having determined the elements whose simultaneans presence permits us to talk about a science, we should see now how far does what we have just said apply to political economy.

II - Political Economy, is it a science?

Political economy will be a science if the elements previously mentioned exist, with respect to it.

1 - As for the **object,** political economy has a well determined object. As we have already seen, it has to do with **social relations taking place through the intermediary of material objects.** That what distinguishes them from other social relations, such as relations within the family, political relations ... etc. Economic phenomena, whose figurated representations are the object of our science, are governed by **objective laws,** laws which represent a real characteristic of these phenomena. Moreover, these laws are independent vis - à - vis Man's volition. In other words, these laws govern the economic phenomena with no attention to the individuals' violition, or to the existence or absence, on their side, of a consciousness relative to these laws. This is explained :

* first, by the fact that the social circumistances in which a certain community effectuates its economic activity are

historically determined : each generation receives from the precedent generations a heritage of productive forces, accumulated knowledge and economic relations, which represent for this generation the starting point of its process of production. To this we add that the process of production is at the same time a process of **production** and reproduction. That is to say that the production during a certain period, be it the current year, realises at the same time the conditions of production for the following period, be it next year. This amounts to saying that the production during a certain period depends on the realisation of its conditions during the previous period. The process of production having this nature, we see that the heritage received by each generation represents the given historical conditions which determine the economic laws that rule under these conditions;

* this is explained, second, by the fact that the **social** result of the economic activity is a result of the interaction between different individual and group activities. A fact which gives the result a certain independence vis - à - vis their volition.

It is in this sense that we say that the objective economic laws are independent from the volition of the individuals effectuating the economic activity in the society.

But,if the laws governing the economic phenomena are independent from the volition of man, their **mode of action** is not so. From this viewpoint, the distinction is made between economic laws whose mode of action is spontaneous, independent from the volition of man, and economic laws having a conscious, intentional, mode of action. For the last ones, and as in the case of the laws of natural phenomena, once the law governing a phenomenon is discovered man can master its mode of action. In discovering the law of boiling, man can master its action : reunite the conditions (the liquid, the temperature and the atmospheric pressure) each time the result is looked for. He can even manage the modality of the realisation of these conditions. He can, for exemple, boil his liquid at a lower temperature by augmenting the atmospheric pressure, and so on. In the same way, if we discover that there is a relation between the purchasing power of some consumers, the price of a certain commodity and the prices of other commodities bought by these consumers, on the one hand, and the quantity demanded from the first commodity, on the other hand, a relation whose essence is that the quantity is determined by those factors, it would possible to affect the demanded quantity by a conscious action on one of these factors (augmenting the purchasing

power of the consumers to augment the quantity demanded, for example).

Thus, we can say in general that the discovery of the objective laws governing the economic phenomena allows us to act consciously by bringing together the conditions necessary for the realisation of a desired result. In this case, we say that the mode of action of economic laws is conscious, intentional.

It remains, to finish with the object of political economy, to point out that this object, being that figurated representations of the ensemble of **social** relations which form the process of the economic activity, has a **historical** nature. As the object is social, it is not immuable (even the phenomena of nature are in perpetual change).

Economic phenomena are, over time, in perpetual transformation, continously by in movement, progressively and sometimes regressively, at speeds that differ from one society to the other, and, for the same society, from an historical stage to the other. Their movement is not linear, it is dialectical : continuity is assured through discontinuities. For exemple, the agricultural activity effectuated by a peasant family in the Egyptian country side of the 12th Century, where the immediate objective of production was the satisfaction of the family needs and of

those who have some property right on the cultivated land (to whom the peasant is obliged to part with a certain amount of his annual product), and production was carried out thanks to the family labour, using simple instruments of labour with a technical knowledge corresponding to the level of development of the means of production; such agricultural production differes qualitatively from a production carried out nowadays within a big farm, owned privately, producing for the realisation of monetary profit through the selling of its commodities, and where production is realised by wage - labour, using sophisticated means of production. The first type of agricultural production represents an economic phenomenon different from that represented by the second type of production. And the objective law of the first phenomenon will be different from the one governing the second. With the reserve relative to certain economic phenomena we can meet in more than one type of society (like some of the phenomena of monetary circulation), common phenomena, economic phenomena differ from one form of society to the other. In other words, economic phenomena are, in principle, specific; they are historical.

We see clearly that political economy has a well determined object, from the fact that it is is interested into

a category of social phenomena (excluding, hence, natural phenomena), which are the economic phenomena, governed by objective laws independent from the volition of man, although the mode of functioning of these laws is not necessarly so. The fact that these phenomena are in perpetual change gives the object of political economy a historical nature.

2 - As for the **method,** the economist utilises the general method of scientific research, the one we have described previously. But he finds himself in disadvantage when compared with the research worker in the domain of natural phenomena. This is due to the impossiblity of making recourse to the experiment on a scale vast enough in the domain of social phenomena (compared with the natural phenomena). It is hardly possible for the research worker to exclude the action of all the forces other than the one he wants to isolate for the purpose of making it the object of observation. Hence, the necessity to make recourse to abstraction. It is in this sense that we say that abstraction plays, in the domain of economic research, the role reserved to the experiment in the research relative to natural phenomena. Abstraction plays, accordingly, a particularly important role. Let us see, more closely, this rôle in the method of political economy.

In the process of investigation of economic phenomena, the abstraction does not represent but a one single demarche. This process resumes itself in two stages. From the concrete- reality to the abstract, and from the abstract to the concrete- thought-out. How are these two stages effectuated ?

The process of knowledge is a part of social practice (social praxis). Its context is always the reality, a well determined social reality. In this context, the first demarche in the process of the formulation of the economic knowledge is that of abstraction. The starting point of this first demarche is the "figurated concret". We alway start from "a representation or an immediate vision" of the concret, under the form of practical categories, ideological, religious, scientific or quasi scientific. From these "representations" we come to concepts more and more simple; from the figurated concret we move gradually from a fine to a finer abstraction. This first demarche reduces the plenitude of the representation to a determinated abstract. How is the abstraction made? The aim of this demarche of abstraction is to isolate the essential of the analysed object, the essential which is reflected by the given representation. In other words, the aim of this demarche is to make abstraction from what is

not essential (i.e., not to take it into consideration for the moment). And, what is essential is not determined arbitrarily, at all. It depends on the objective of the analysis, on one side, and on the objective conditions of the object, on the other side. The abstraction is founded on the comparative observation of the object and its analysis. What is left after abstraction must represent a simple and profound image of the principal characteristics of the analysed object. It must reflect a simple and profound image of the essence of the envisaged phenomenon.

Once the essence is raised to a certain level of obstraction, that is, the concret reduced to a certain abstract image, the analysis can be carried out. The concepts (and conclusions) formulated correspond to this level of abstraction. This should never be forgotten.

The second demarche of this process of investigation aiming at the formulation of economic knowledge is to pass from the abstract to the concret-thought-out. With demarche the abstract determinations lead to a reproduction of the concret by thought, through a process of progessive concretisation, a process of gradual introduction of the elements out of which we have made abstraction, a process of a gradual descent from the abstract towards the concret, a process of a passage from a

level of abstraction to a less abstract level. With the progressive introduction of elements that were abstracted from in the first demarche, the conclusions obtained at a higher level of abstraction are susceptible to undergo modifications.

And so on, until we arrive to the concret, but the concrets as it has been reconstituted in our thought. It is not a matter this time of the categories from which we have started but of a rich totality of determination. It is a matter here of theoretical concepts, of scientific categories, of scientific economic knowledge. These categories are, hence, theoretical and concret, at the same time. They are theoretical categories which correspond to the economic phenomena in consideration.

All throught the investigation, the theoretical analysis must consider the object, at whatever level of abstraction, in its development, and as an object of a fluid nature, in a continuous state of flow and metamorphosis.

In one word, the method of investigation resumes itself, with respect to economic phenomena, in an **ascent** from the concret - reality, as represented by some categories already existing, to the abstract, from the complex to the simpler, then **an analysis** of the abstract image of the object studied in its movement, an analysis which leads to

theoretical ideas, and, finally, a progressive **descent** from the abstract to the concrete, with the conclusions being always susceptible to modification with the gradual introduction of the elements of reality from which we have made abstration. We arrive once again to the concret, but it is not the same concret of the starting point, it is the concret reconstituted in thought : the scientific knowledge is acquired.

With respect to the type of **inference** [29], the method of investigation is of an inductive - deductive nature, with induction playing an auxiliary role.

It remains to verify the obtained theoretical conclusions. In the domain of economic phenomena, such verification is effectuated (after having eliminated the possible logical contraditions between the different parts of the theory) either statistically, when it is a matter of phenomena quantitatively measureable, or hsitorically, or in the two manners at the same time.

Once the knowledge acquired, it has to be presented. So, the neceesity of a method of presentation.[30]

All that for the method of political economy. It remains to add that a part of the deductive logic occupies a particular place in the techniques of economic analysis[31], we mean

mathematics[32]. In face of a rather spread tendancy which exagerates the utlisation of this technique in the economic analysis, we should be conscious, from the outset, of its appropriate utilisation.

Having to do with mathematics as the **form of economic reasoning**, and as they are the instrument of quantification, only the quantitative, and quantifiable aspects of the considered economic phenomena could be analysed with the aid of mathematical instruments. And, as the study of the quantitative aspects is not possible but on the basis of a qualitative knowledge of the phenomenon, a qualitative analysis should precede a quantitative analysis using the mathematical method. Meanwhile, we should not forget that we are interested in the economic reasoning under a mathematical form. In no case, should the economic reasoning be replaced by another sort of reasoning. To replace the economic reasoning by the mathematical one distorts necessarly our analysis and handicaps the development of political economy.[33]

It remains to say that the utmost utility of the mathematical method presents itself in the construction of economic models.[34]

We see, then, that we utlise, for the formulation of knowledges that constitute Political Economy,the method

of scientific research in general, in emphassing abstraction which replaces the experiment in the study of economic phenomena. We have seen, too, that we can make recourse to the mathematical instruments for the quantitative aspects of these phenomena, on the condition that this study be preceded by a qualitative study.

Having seen the state of the object and the method of political economy, it remains to see how the state of the actual economic knowledge presents itself.

3 - Politcial economic gives us, actually, a minimum of certitude which can serve as a basis for the explanation of the economic phenomena (which constitute the different modes of production) and for the reasonable prevision of the general tendences of their future movement. Here, it is a matter of the ensemble of theoretical economic laws (or economci theories) at our disposal, related to the different types of economic process, and are scientifically verified. (This excludes the theories whose validity has not been proven while confronting them with the economic reality in its historical movement; the absence of such validity is attributed to a false conception by the authors of such theories of the object and method of the economic science in their organic relation). And, as the object of political economy (i.e., the figurated representations of the

economic process under its different social forms) has a historical nature, its laws will also have this nature. Hence, we cannot talk about economic laws but within structures qualitatively distinct. It follows that political economy, being the ensemble of (theoretical) laws relative to the process of production and distribution under its different social forms, would have a historical nature. There is no economic science valid for all the forms of society. We cannot expect that the economic laws will be the same for a society where the production of subsistance products **dominates** as for a society where commodity production **dominates**. Similarly, we cannot expect that the economic laws will be the same in a society where the relations of production (in their interaction with the development of productive forces) are based on the private property of means of production as in society where these relations of production are founded on the collective preperty of means of production. There is, certainly, many economic phenomena that we can find in more than one form of society to which correspond (theoretical) economic laws commun to these forms of society (the laws of monetary circulation, for example). But, to identify the nature of the economic process in a certain society, one has to put the emphasis on its **specific** economic laws, which are more

important, for this purpose, than the economic laws commun between this society and other societies. We hope that this point will be clear when we study, later on, the concept of mode of production.

* * *

In this way, we can conclude that political economy is a science, a science whose autonomy can be precised. To precise its autonomy, yes, but on the condition of accepting that autonomy does not mean at all independence vis - à - vis the other branches of knowledge, especially those relative to other social phenomena, for, man, whose economic activity makes the object of our science, reunites all the aspects of social life.

Such autonomy can be characterised with respect to other social sciences, especially sociology, demography and human geography.

Let us try to find out the position of political economy in relation to these branches of scientific knowledge.

Section III : Political Economy and the other branches of social sciences:

The division of the human activities is not habitually a profitable preoccupation, for, between these activites, exists no clear-cut line of demarcation. It follows that no investigation in one domain of these activities could be carried out without referring to the other domains. This applies, à fortiori, to social sciences whose object is the different aspects of the social activity of man. As sciences, they represent the branches of knowledge having as an objective the understanding of the relations between the members (groups and classes) of the society as well as their transformations over time (history, geography, demography, sociology, psychology, political economy,... etc). Meanwhile, to conduct, more precisely, the scientific research, an abstract division of social relations has been effectuated over time, taking each category of social relations to make, seperately, the object of a branch of social sciences.

Guided by this basic idea, this section will not have as objective to define the different branches of social sciences in relation to Political Economy. It would rather put the emphasis on their interdependence, in associating,as a an example, Poitical Economy with some of these branches, namely, geography, demography and sociology.

I- Political Economy and geography:

Geography (*) is the study of the world as a milieu for Man. In other words, it is the study of the physical environment of the human species. As for **human geograpby**, it finds it subject matter in the(examination of the relations between the behaviour of human collectivities and the physical and climiatic milieu)(**). Gievn the fact that this milieu is itself, to a very large degree, the creatien of present and past human collectivities, it is a matter, effectively, of analysing the reciprocal relation and the bilateral permanent shaping between the communities and thier doings (***).

The point at which the contact between political economy and geography is particularly established is that of the

---

(*) The etymological origin of the term is found in the Greek word gô with the suffix "graphy" - The word gô means "earth", and the suffix "graphy" denotes "desecptive science". Literally, the term designs "the descriptirve science of earth'.

(**) There is no other science interested in this envronement as such: the geologist can study the rocky stucture of the earch's crust, the meterologist can be interested in the climat and the weather, the botonist in the life of plants and the zoologist in the life of animals. The geographer needs just the results of each of these sciences in order to appreciate, as a concrete living totality, the scenery where Man is called to live and play his role. See, L.Dubley Stamp, Modern Geographical Ideas, in, An Outline of Modern Knowledge, W. Rose (ed.), V.Gollance, London, 1031, p. 813 &sqq.

(***) P. George, Geographie de la ppulation et démographie, Population, Paris, 1951, no 2, p. 291.

(localisation of the economic activity)(especially of the production units). Here, it is a matter of what is called the economic analysis of the space (*).

Here, geography provides the economist with a better knowledge of the physical and natural conditions of the economic acitivity ; it informs hims on the concentration in space of energy,raw materials and demographic agglomerations. On the other hand, the theoretical knowledge of the economic activity helps to understand one of the most effective factors which shapes the geographical milieu: the economic activities of the societies. Such knowledge will be, then, indispensable for our analyis in the domain of human geography.

II- Political Economy and demography:

Demography (**) is the branch of knowledge having as object the population, its state and its movement over time

---

(*) See von Thuunen, The Isolated State, P.Hall (ed), Perganen Press, London, 1966.

(**) The etymological origin of the term is found in the Greek word "demos", having the suffix "graphy". The "demos" has in the Greek language, two meanings:
-the country, the land inhabited by a certain people.
- this people itself, defined ethnically , i.e., from the viewpoint of race , of its relations with other races and of its characteristics. It is this second meaning which interests us here. The suffix "graphy" denotes" desciptive science.
=

and space. The controverses still exist with respect to the aspects of poulation which demography is to treat:

- Some writers hold that Demography has to confine itself to the numerical analysis (the quantitative aspect) of the population: its situation and movement(*).

- Others state that a qualitative demography also exists.It interests itself in the qualities of human beings:physical qualtities, physico-intellectual qualities (the manual habits of working, the talents), pure intellectual qualities, charachter qualities and moral qualities(**).

= Literally, the term denotes the"descriptive science of population". The term was put in circulation by Archille Guillard in his book "Elements de statistiques humaines ou demographile comparée", Paris, 1855. See A. Landry, Traite de démographie, Poyot, Paris, 1945, p 7 & seqq.

(*) It is in this sense that we find the definition of demaography in the "Grand Encyclopédie" (vol. 14, 70), where demography is considered as "the science which, with the aid of statistics, deals with the human life conceived principally in the birth, the mariage and the death, with the relations resulting from these phenomena as well as the general state of the population as the outcome of all that.

(**) It is in this direction that Guillard defines demography as "the mathematical knowledge of population, of its movements, and of its pysical, civil, intellectual and moral state". see Landry, op.cit.

As for the method, we can use in the demographic research all the conceivable methodogical means of the human spirit in search of scientific knowledge. Statistics as a method plays here a particularly important role. We see, hence, that population is the center of interest in the demeographic studies. While defining the object of Political Economy, we have seen that Man, in society, is the main actor of the economic activity. Being so, the demographic factors affect, without any doubt, the economic activity in dereminig its basic conditions: the labour force, its quantity and quality, and the tension of the population needs whose satisfaction represents the final objective of the economic activtiy.

On the other had, the economic factors affect no doubtly the manner in which the population is distributed, quantitively & qualitatively, over the social space, its density and the forms of human groupings. They affect also the attitude towards child-bearing. And, in determining the material conditions of life, the ecoonomic factors affecte the natality, the mortality, life expectaton and the population movement over the space, and hence the rate of population growth(*).

(*) Political Economy and demography: after having made, at its begining (See, W. Petty & R. Mallthus), of demography one of its essential chapters, poltical Economy became uninterested in demographic research which was left to statisticians.

III- Political Eeonomy and Sociology:

Some authors define sociology as "the study which wants to be scientific of what is social (social facts, M.D.) as such, be it at the elementary level of inter persons or at the level of soecities, nations, civilisations or, to use the current expression, the global societies(*) ". But if we want a scientific definition of sociology, we can say that it is the science of the general laws of the development of human socity. The object of sociology is, hence, the social phenonena **as such** in their total movement. Each of the other branches of social sciences has as object a certain type of social phhenomena which are **first social** and representing, second, **one of the categories** of social phenomena: economic in the case of Political Economy, psychological in the case of psychology, historical in the case of History..... etc.

It follows that while Political Economy is interested in the nature and develepment of one category of social phenomena, the economic phenomena as the basis of social life, Sociology is interested in the social totality in its becoming, with the hope to be the science of the movement of the social tototality. The importance of each in relation to the other is, hence, determined by:

- The place which the economic activity occupies in the whole

(*) R.Aron, Les etapes de la pensée sociologique, Editions Gallimard, Paris, 1967, p. 16.

social activity and the effect of the econoimc basis on the determination and functioning of such social whole.

- The effect of the movement of the social whole on the transformation of the economic activity in the society.

The liaison between the two appears in particular in economic sociology, a special branch of sociology. If the economic analysis seeks to know how the members of the society, in their class belonging, behave economically at any instant and what are the effects of such behaviour, economic sociology tries to answer the question of knowing how they became to behave as they did. In this way economic sociology provides us with the indispensable knowledge concerning the social framework in which the economic activity takes place; it will have as a task "to precise in which historical and structural conditions the different economic laws are to operate and, hence, to give the economy, at the same time, choice and efficacity[*].

* * *

We seen, then, that economic phenomena are dialectically related to non-economic social phenomena constituting the organic totality of social life. in its geographic milieu. Accordingly, Political Economy, which is interested in the

(1) Ch. Bettelheim, Annales, no 3, Paris, p 2678 & sqq.

economic activity, has to be studied, despite its autonomy, in intimate connection with the other branches of social sciences, **given the unity of human knowledge.**

* * *

We have now our science, Poltical Economy, defined: its object deleimited and its method traced, both being organically related. It represents a branch of social sciences whose interdependence should never be forgotten. The formation of such science (the formation of its embryo,, its birth and its develepment) did not occur over might, but during a historical process that took, and still takes, place under the form of continuity, of discontinuity and of progression through contradictions: a progression which is far from being realised in a linear manner which ignores regression, Grasping the general features of this process permits us to define better the horizons of our science and to familiarise ourselves with the great economic thinkers. This is what we will attempt to do in the coming chapter.

Chapter Two

History of Political Economy

In this chapter, our aim is not, in any way, to carry out a detailed study of the history of **economic thought.** A study impossible to realise without receiving the effort and the time it deserves.[1] Here, we limit ourselves to an intensive reading of the history of **political economy as a science,** a reading with a well limited objective, that is:

- to grasp the different stages of the birth and development of our science, and
- bring up the principal questions which have polarised the attention of the big builders of this science, giving the occasion to its object to be crystallised, to its methods to be forged and to the economic knowledge which constitutes it to be accumulated.

What interests us, then, is the history of the science and not the history of economic thought in general. In other words, we are interested into the **historical process** of the birth and development of political economy as a science. And this science has witnessed a recognised birth through a slow process that covers the period from the middle of the XVIIth century to the middle of the XIXth century.[2] But,well before

this period and with the rise of the capitalist mode of production, the economic thought has known a transformation that paved the road for the birth of this science with this mode of production. The fact that we are interested in the history of the science, and the fact that its birth is associated with the capitalist mode of production, these two facts justify that we make the distinction, in the presentation of the history of our science, between two grand eras. A precapitalist era which witnessed an economic thought (for, an economic thought existed since man preoccupied himself with the knowledge of his natural and social milieu) and a capitalist era with which political economy as a science is associated. Within the fromework of this last era, having had its road prepared, our science is born during a first phase. It develops during the following phase which continue up to our days, which witness the general crisis of the capitalist mode of production and the search for an alternative mode.

Accordingly, this chapter is divided into three sections:

- in the first, we through a glance over the economic thought of the precapitalist era;

- in the second, we see the birth of political economy during the stage that witnessed the rising domination of the capitalist mode of production; and

- in the third, we follow the development of the science during the capitalist stage and that of the search for an alternative mode of production.[4]

Section I : The economic thought at the precapitalist era:

During this era (which covers the Antiquity and the Middle Ages (for Europe), economic thought did not have an autonomous existence. It always existed within another form of thought : within philosophy for the Greek thought, within theology for the Middle Ages of Europe, and within history or the philosophy of history for the Arab thought uptil the XIV[th] century.

I - The Antiquity

In the sacred books of the Antiquity, the economic ideas represent impressions relative to the economic facts of the society which produces them. They are ideological impressions having nothing to do with the scientific analysis. It will be, consequently, more correct to consider them as informations about what occured in the economic life of this epoch.[5]

For the Greek (especially with Plato, 427 - 377 B.C. and Aristotle, 384 - 322 B.C.), the economic thought exists amidest pholosophy, since their economic reasoning makes an

integral part of their philosophy of the State and the society. Here, it is a matter of a society organised in the form of a City - State, which is characterised by a limited superficies, a small population, a localisation around a fortress existing usually on a hill, and the existence of a Forum (public place) where the assemblies meet. This organisation has been imposed by the géography of Greece and the type of tribal organisation(6) that was previously dominating. It finds its axis in the **mode of production** predominating the epoch, especially during the Vth and the IVth (B.C.) in all the countries of Greece, in general, and in Athens, in particular. That is to say, in the space and at the time that witnessed the thinking of Plato and Aristotle.(7) The agricultural activity is effectualed under difficult natural conditions : a poor soil, a fact which demands that the land is to be cultivated one year and left to lie fallow the next year. This soil is rarely plat, a matter which pushes to the construction of terrasses to be covered by grape - vines, figtrees and olive-trees. As for the type of the unit of agricultural production, we can make the distinction between three types : the units of big proprietors who own the most fertile land, on which cereals are cultivated and bovine and horses are bred. These proprietors do not participate to the process of labour. They employ the slaves they own and the wage - labourers subordinated to them although they have a

status of a free man. These big properties do not cover but a relatively small area of the cultivated land. The majority of land is cultivated by units of small proprietors whose number is very big. They count for one half, or more, of the population. The area cultivated by each unit is small and often pacelled. Production is carried out by the labour of the family members and the slaves the family owns, using simple means of production. These small proprietors, despite their status as citizen, (that is a free man), are dominated by the big proprietors of their neighbourhood. These big land proprietors represent the elite of the countryside and even of the city). Beside these two types of agricultural production units existed the units exploited by individuals employing the slaves of the State, the hillos[(8)], or ilotes, ceding to the State a part of the recolt, in nature. The State (in Sparte) can, and it is the only one who has this right, liberate its slaves. In this case, each of them can cultivate the parcel of land he wants. He has the right to make a family to cultivate the land with him, provided that he cedes to the state a part of his product, a part that will be determined once for the life. He has the right to dispose of what remains for him from the product.

This agriculture could not, in its totality, satisfy the needs of the population, especially in cereals. From here comes the necessity to make recourse to other countries (Sicily, Italy,

Egypt, the coasts of the Black Sea), and with this the necessity of **foreign trade** which will be concentrated in the cities and especially in the ports. It has flurished in Athens to become a basic activity practiced principally by persons who do not have the quality of a citizen. Such activity was founded on the capital of **money - lenders, the money capital**. Thanks to this foreign trade, the population was supplied by from $\frac{2}{3}$ to $\frac{3}{4}$ of the quantity of cereals it consumes.

To **import** cereals, one has to **export**, export some agriculutral commodities, like wine and oil; but these are insuffisant. Hence, the recourse to the **industrial activity** to provide trade by a number of commodities : skins, arms, pieces of metalic money, etc.. Hence, the expansion of the industrial activity and the extraction activity it requires. Such activity is carried out by artisanal units and small workshops owned privately. The number of the aritisanal units is big. The craftsman carries out labour with the members of his family assisted by a number of slaves. He could employ wage - labourer. Production is carried out in the house of the craftsman in response to a previsions demand of customers providing oftenly the raw materials. The small workshops produce, too, industrial products. The biggest workshop employed 120 workers (in the fabrication of arms). In the workshop, labour is effectuated by the wage - workers and the

slaves. This industrial activity, depended, for many of its raw materials, on foriegn trade.

The **extraction activity** took place in the mines of the state, as these of Laurion (which belonged to Athens). To exploit these mines, the State grants concessions to individuals having a capital, provided that it monopolies, itself, the trade of the extracted silver. This extraction activity was carried out by slaves either owned by the commessionaire or hired by him from their owners.

In this economy, the basis of the Greek society, exchange, and monetary exchange, was rather spread. Moreover, money, which was invented in the begining to facilitate the act of exchange, i.e. to be used in a sale in view of a subsequent purchase, this money is used, in this economy, for a new purpose : buying in view of a subsequent selling. In this case, the accumulation of money ceases to be a means for the realisation of an objective (obtaining a commodity); it becomes an objective in itself.

From this, we can trace the class structure of the Greek Society. At the summit of the social pyramid we find the aristocratic class, the big land proprietors, the "rentiers", who live on an income in the production of which they have never participated. They despise manual labour and govern the society of city. To this class is tied the rest of citizens who

constitute the middle class of small proprietors and craftsmen. The members of this last class have politcal rights, they have access to the civil service (they participate in the administration of the city). To this middle class are attached the foreigners the **metekos** (Lesmetéques). They are free, but they do not enjoy any public right, nor the right of landed property. Nevertheless, they play an important role in trade and the other profession that the city knows. (They have dominated trade in the IVth century B.C.) They play, too, an important role in the literary life of the City. Their role goes far behind their relative weight in the total po pulation of the city. This social pyramid finds its ground, finally, in the slaves, for they are the "means" of the agricultural, industrial and the mining activities as well as the State public works. They carry out the domestic work and they are at the service of the warriors on the battle field. It is that role which explains how the trade of slaves became one of the most lucrative of the economic activities. It is on this basis that we can qualify the **Greek Society as a slavery society,** although some historiens, auxtious to present the ancient Greek Society to us in a rosy image, mininimise the importance of slavery as a basis of the society.(9)

This organisation of this process of production founded on the labour of slaves bears its limits in itself, that is the limits

of the possibilities of its development. Because it is an organisation which removes every incentive on the side of the direct producers (the slaves) to augment or ameliorate the effort necessary for the good utilisation of new means of production (limitated or discovered); a utilisation which implies an increase in the productivity of labour so that if can meet the continously increasing needs of the society (especially those of the preprioters' class). On the contrary, the slaves tend towards the destruction of the means of production as a reaction to the operssive life conditions they have.

In this society, **economic ideas** are found within philosophical ones, for, it is very rare that the economic problems are discussed as such. All the ideas relative to them oscillate, like all the Greek thought, however, ar ound the concret problems of the life of man. These problems have this center in the idea of the City-State, the "polis". The economic thought was, hence, in its totality at the service of politics in the largest sense of the word.[(10)]

Within the framework of the Greek thought, **Aristotle** distinguishes himself by a great capacity to pentrate into the analysis of economic phenomena. He sees "the economic facts and the relations existing between them on the light of the ideology of a man who had lived and written for a cultivated leisure class, a class who dispise labour and trade, likes the

peasants who feed it and hate the money - lenders who exploit it".[11]

The economic analyse of Aristotle is founded directly on the **needs and their satisfaction.** These needs are satisfied by the goods. These goods are obtained thanks to a number of activities : agriculture, breeding, fishing, hunting and even brigandage (which he considers as a sort of hunting), as well as the industrial activity and mining. All these activities represent natural means for the acquistion of goods[12]. Besides, there is trade which Aristotle does not conider as a natural activity (hence, the necessity to be condemaned).

As for the unit which effectuates these activities (the production unit), Aristotle starts from the self sufficient family units, i.e., the units which produce for the satisfaction of the needs of the family members (natural production).[14] Then, he introduces the division of labour as a basis for the exchange in natural terms, the troc[15] or barter, and for monetary exchange, that is the exchange of commodities for money.[16] When it comes to the production for monetary exchange, that is the production of commodities to sell in the market, it was noticed that these commodities are sold at **prices** that should be explained and whose modality of determination to be known. In this context, he talks about **the**

value of the commodity[17] (and value is a social characterestic which renders the commodity object of exchange, M.D.). Here, he makes the distination between the **use-value** (which is an objective characteristic of the commodity which renders it capable of satisfying a well defined want, M.D.) and the exchange - value (which is the form under which value expresses itself at the moment of exchange, it is a ratio between two values, M.D.). And, he gives us two contradictory ideas. According to the first idea, the exchange - value is derived, in one way or another, from the use - value. Moreover, "it is necessary to find a measure common" between the exchanged things". "This commun measure is exactly the needs which each of us have to the others a matter which maintain the existence of social life".[18] According to the second idea, the exchange of commodities is considered as an exchange between labours : for a relation of exchange takes place between the architect and the shoemaker "the architect must obtain the labour of the shoemaker in order to give him his labour in exchange".[19] Whatever the idea Aristotle made about the source of value, it is clear that he has discovered in the exchange - value (as an expression of the value of commodities, M.D.) a relation of equality.[20]

These are the limits behind which Aristotle does not go in

the domain of value and price. He does not have a theory of price (which is the monetary expression of the exchange - value,[21] M.D.). Meanwhile, he treats the case of the monopoly, which he considers as one of the forms of the market where a single seller of the commodity dominates.[22]

As for money, it is for Aristotle, **means of exchange** which save us the inconveniences of barter, i.e., the exchange **en nature.** But, to fulfil its function as a medium of exchange money should have the characteristic of a marchandise : i.e., it has to be a product having a use - value and a value independent of its monetary function and comparable with other values (silver, for exemple, is, before it becomes money, a commodity which has a use - value, as it could be used in the industry of utensils, of jewllery.... etc., and which has also a value independently from its value as money). Aristotle adds, summarily, that some commodities, like metals, are more qualified than others to fulfil their function as a **measure of value**, as the exchange value of each commodity is expressed by a certain number of monetary units. In this way, money can express the prices of all the commodities. The third function of money is the one it fulfils as the stock (store) of value[24], that is, the means through which wealth is stored up, withdrawn from circulation, either temporarily or permanently.

Finally, Aristotle approaches the problem of **interest** (that is what the money - lender receives in addition to what he has lent, M.D.). He accepts it as a real practice. But, he condemns each loan with interest and considers it as usury, for "money has no infants"[25]. Meanwhile, Aristotle does not ask the question : why, despite of that, interest is paid in the practice of social life ? The fact that Aristotle does not ask himself this question and does not, consequently, give an answer, invites us to say that he does not have a theory of interest.[26] We notice, too, that his economic ideas do not include a **theory of distribution of the social product** (a theory of income distribution), i.e., a theory which explains how the social product (that is all what the society produces during a certain period) is distributed among the members (and the classes) of the society, or rather a theory that explain how is determined the share of each social class in the result of the production process.

II - The Middle Ages of Europe

The **feudal social formation**[27] has dominated Europe from the Vth to the XVth century. It is so called every social formation having as a pivot a mode of production where the agricultural direct producer[28], the peasant, who was either a free man or a slave, will be subject to a series of noneconomic constraints which limit his liberty and his personal property in

such a way that makes him tied to the land with a certain economic, social and personal subordination to the land owner, as a representative of the proprietors' class.

This mode of production, which started in France to spread out afterwards in England and the rest of Europe, is characterised by:

- social relations of production which gravitate around the land, which becomes the crystallisation of landed-property. It is a matter of an economy primordially agricultural.
- the fact that those who effectuate the labour in the process of agricultural labour do not have but the right to utilise the land. As for the right of property, it belongs to a hierarchy of lords. Neither of them has an absolute right on the land, but each of them has a right on the product of land and on the heritage of the landowner occupying a higher rank in the heirarchical pyramid. Such right is determined by habits and customs.
- the fact that this economic basis corresponds to a net of personal relations : a part of the labourer (the majority during the period of the domination of this mode of production) do not enjoy a total personal liberty : they are not slaves (since they are not object to property), but they are **serfs**(29) attatched to their landlord, at a first

stage, and to the land they cultivate, at a second stage. Even among the landlords, the system of property is tied to a system of obligations (especially military obligations) to which each landlord is subjugated vis - à - vis his suzerain.

In this way the political organisation of this society is defined. The state has a decentralised existence based on the autonomy which the landlords enjoy in practicing the in authority, a practice which takes palce from one person to the other ("justice" is established by the big landlord vis - à - vis his vassals, and by each landlord vis - à - vis his serfs). The economic appropriation is interlaced, hence, with the juridico-political apparatus.[30]

This mode of production finds its roots in the ancient society when the big landowners (the members of the aristocratic class) started to resist against the authority of Rome by residing on their land properties (villas) and enlarging these properties by the emprise over small and abandoned properties. As for the owners of small properties they were too poor to resist against the Roman tax collectors, their rich neigh bour and the Germanic invators. Hence, their quest for protection on the side of a big properitor to whom they cede their land and a part of their liberty. The property goes to the big owner but the land continues to be exploited by them and their children, provided that they cede to the lord

a part of the product of their labour and stay faithful to him.(31)

The big land owners start to realise that this new type of agricultural exploitation is more profitable for them, since the production of these direct producers goes behind that of the slaves (who have no incentive to produce) and they take care, by themselves, of their own living. In this system we find the roots of the system of **serfdom. But this does not means that serfs existed as a result of a partial emancipation of slaves.** This means that the free peasants of Europe (who produced independently on their small propertis) have acquired this status of "colonat" which existed in the antique slave society through a process of subordination. This subordination does not find its cause only in the abrupt invasion; nor in a bilateral development of an ancient status of subordination (slavery or colonat of the Antiquity); but it is the product of a spontaneous coming together (which is relaised under intermingled pressures of facts and the slower violent action of the dominating classes) of tendancies of different personal status towards a real state (the status of serf) which presents itself, finally and regularly, in a unified legal status. Law does not precede reality, it crystallies it, but not create it. All this took place in the framework of the social life of the members of the village which kept its common pasturages, common forest, commun uncultivated land as well as other aspects of the collective life.(32)

The rise of this mode of production is associated with a great transformation, despite its slowness, of the productive forces; a transformation which took place under the influence of immigrations of the preceding period from the East (China in cluded) to the West[33]; under the influence of trade which did not stop with the cities of the Mediterranian Sea as well as the influence of the Arab invasion of South - Western Europe. Within the framework of the techniques of agricultural production, this transformation presents itself in a better utilisation of the motor force generated by the current water for the functioning of water mills for cereals and oil; which leads at the liberation of domestic labourer, a matter which allows their employment in a more productive activity. This transformation presents itself also in the introduction of new means which allow for a better utilisation of the animal motor force (the Yoke, e.g.). The instruments of labour, too, have witnessed improvements through the replacement of iron instruments for wooden ones (increasing hence the productivity of agricultural labour).

Started to utilise, at a large scale, the heavy plough, with wheels and deversoir, which allows a better preparation of the soil. Were interoduced, too, new recolts like the oats used as food for man and animals, especially horses. It had as a result the amelioration of the equine race and the expantion of its breeding. This has lead, by the end of the XIth century and on

to the replacement of oxes by horses as a tracting force. The bianual agricultural rotation (one year, cultivation and one year, fallow) has been replaced by a tri-annual rotation (one year, wheat, one year, bearly and the third year, fallow)[34]. All these aspects of transformation of the production techniques have suscitated an increase in the productivity of agricultural labour. The increase in labour productivity decreases the number of labourers, serfs or slaves, needed on the lord's land. This means the dimintion of the number of statute labour hours the peasant family has to spend on the Lord's land.

The increase of the productivity of labour on the land cultivated by the peasants for themselves and the diminition of the hours of statute labour entail a tangible amelioration of the level of nutrition of the peasants, a matter which stimulates a population growth. These factors have to be kept in mind if we are to understand the transformation which the feudal mode of production in general has undergone. What image had the socio-economique unit within that mode of production ? If we are to trace the general features of this unit, we should avoid any simple generalisation that might suggest that the socio-economique units are identical. Effectively, there existed big differences among themselves. Meanwhile, such differences do not deprive these units from having in common a feudal type of organisation.

In the countryside, the **manors** represented the socio-economic units. The unit, the **fief,** is founded on natural (subsistence) agricultural production, seeking, at least at a first stage, a sort of **self-sufficiency.** The fief is a fortified farm which contains the cultivable land, the common pasturage and the common forest, the woods. In most cases, it is composed of one village, sometimes two. Within the fiel, usually at the highest place, exists the castle of the landlord, who has a limited right on the land, a right corresponding to the place he has in the hierarchy of the feudal property pyramid. In the village's cottages live the direct producers who are the serfs (representing the majority), the slaves (whose number diminishes over time) and the free peasants (a minority, each owing a small parcel of land). In the village live usually a number of craftsmen, an iron-smith, a potter, a carpenter... But this does not exclude that the peasant family carries out some artisanal production. In the fief, there is also a water mill if the fief is in the proximity of a stream, or a windmill, if it was not. Moreover, the fief includes, finally, a church and a presbytery, if the economic unit corresponds to the canonical division of the territory of feudal Europe.

The cultivated land of the fief is divided, at a first stage, into land to be cultivated directly for the lord, the lord's domain, and land to be cultivated by the peasant families,

each having a small parcel, in their own interest. Each parcel is worked out by the family independently. Meanwhile, the principal agricultural works, such as sowing and collecting the harvest, are carried out collectively. The peasant family, as a **unit of production,** does not own but a limited quantity of simple instruments of labour, for, the most important of instruments are owned by the landlord (like the cereal and oil mills, and some of them (like the cart) are owned collectively by the families of the village.

In order to be able to exploit these small parcels of land in its own interest, to live on its products, the peasant family is obliged to work during some days of the week (three days in the average) on the lord's domain. In this manner, the lord appropriates the **rent of the land** exploited by the peasant family in the form of **labour time, a labour rent** appriopriated through direct constraint.

More than that, the peasant is bound by other obligations vis - à - vis the landlord : to cede a part of the product of the land he exploits for himself, to cede some of the animals he breads and of the fish he fishes; to grind his grains in the lord's mill, bake his bread in the lord's oven, make his bear in the lord's brewery. And to use all these means of production owned by the lord the peasants have to part with another part of their product to the landlord. All these obligation were

supported by all the peasants, serfs and free peasants, with a higher weight on the former. In this way, the labour time of the direct producer (the peasant family) is divided into labour (agricultural in the fields and artisanal at home) effectuated during some days of the week on the parcel of land he cultivates for himself : producing what is necessary for his life and for the reproduction of the labour force; and another part of his labour time : a gratis labour effectuated some else where, on the landlord's domain during the rest of the week. This last part of the labour time is materialised in a quantity of product appropriated by the landlord.

Thus, it becomes evident that if the fief, which is a big property with a certain volume of population, represents the socio-economic unit of the Feudal world, production is based on the small productive unit, the peasant family; a unit which differs from the small agricultural unit which existed at the time of the disintegration of the primitive society in the transition towards the slave society (where the big unit of agricultural exploitation, based on the labour of slaves, was dominating). This is because the small feudal unit of production is characterised by a level of production techniques relatively higher (though still limited). On this last unit, the means of production which appeared in the system of big exploitation units of the Antiquity (like the water - mill

and the oil - mill), these means were combined with the advantages of small units of expolitation where the direct producer, the members of the peasant family, have (contrarily to the slaves) their stimulation to produce and the inventive power for the augmentation of the productivity of the agricultural labour. And, since these means of production (to which we add the means introduced under the influence of the immigration from the East and these of the Arab invasion to the South - West) enhanced the creative possibilities of the direct producers (the peasants) on the small units, we find this ensemble of means of production **reunited in the hands of the landlord,** a matter which makes out of him a sort of organiser and master of not only the process of production but also the whole social life. This was valid only for the first stage in the history of the feudal mode of production.

At a second stage, the increase in the productivity of agricultural labour(35) leads to the diminition of the number of forced labourers necessary for the cultivation of the lord's domain, as well as to the augmentation of the product on the peasants' parcels. This entails, too, through the increase in food products, more industrial production within the family. The possibility that the lord's domain could be cultivated by less labour hours (if the peasant has a motif to do it) and the increase in the productivity of labour on the peasants' parcels,

these two factors made it more advantageous to the landlord to cede the **totality** of the cultivated area to be divided among the peasant families and worked out by them. In return, he would receive, annually, a part of the product of land bigger in quantity than the part he used to receive from the mode of expolitation of the lord's domain.

This amounts to saying that the landlord appropriates his land rent **en nature** (rent in kind). Here appears beside of the labour - rent, the **rent in kind** which will become the **dominant form of land rent.**

At this stage, we find the direct producer (the peasant family) who possesses all the conditions of labour except the land which respents, in that society, the "container" of the process of labour, and as such, it represents the only condition which **confronts** the producer as a property separated from him, independent of him and **personalised in the landlord.**

This direct producer carries out the labour, all the labour, on the land he exploits. He does not, anymore, work on the land's domain. He disposes, hence, of the totality of his labour time, ceding a part of its product, no longer under the direct control and constraint of the landlord, but by the force of **social circumstances** which replace the force of direct constraint. It is the **legal obligation,** and no longer the whip, which conducts him to accomplish this labour, to undertake

his responsab lities. Consequently, the landlord stops to play a role, organisational or other, in the process of production and becomes one of the social parasites.

This rent in kind supposes the contiunity of the natural economy, the subsistence economy (though with higher level of productive forces), where the conditions of production and reproduction are totalty or mainly realised within the socio-economic unit, the fief, which is not dependent on other units, i.e., has no need to exchange with other socio-economic units, that is has no need of the market. Within the framework of this socio-economic unit, agricultural activity is mingled with domestic industrial activity within the family unit of production. The rent in kind will be then the product of this amalgam of agricultual and industrial labour whatever the sort of products the landlord effectively receives. The whole labour time of the family productive unit will be constituted of two parts : a part spent in the production of what is necessary for the life of the family, the **necessary labour,** and a part exceeding that necessary for the payment of land rent : the **sur - labour.** The former is materialised in the **necessary product,** the latter in the **sur - product,** on which would live those who have a right on the land, without particpating in the process of labour (the nobility & the clergy).

This sur - labour is materialised then in the rent in kind. But, it is not necessary that the rent exhausts the totality of the sur - product, i.e., exhausts the labour - time which exceeds the labour necessary for the living of the peasant family. Compared with the case where the rent had the form of labour rent, the direct producer has here a bigger possibility to gain a part of labour time during which he can produce a **surplus** to be kept for himself, a surplus above the quantity which is necessary for the family living. In addition this form of land rent gives the occasion of the emergence of differences in the economic status of individual producers or at least the emergence of the possibility of such differences (and also the possibility that a producer acquires the means of exploiting other labourer directly), which means the emergence of **social differenciation among the peasants.**

At a third stage, rather related to the expansion of trade and cities and the increasing utilisation of industrial products by the land propriętors, appears, beside the rent in kind, a form of financial rent. It appears at the begining in a timed way to become, with time, the dominant form of rent. It is **money - rent :** the rent in kind is transformed into a money - rent. Here, the producer cedes to the landlord not a part of his product, but the **price** of that part. And to do so, he has, all in

producing the part of the product necessary for his life and his family's life, to produce a part of the product in the form of **commodities,** i.e., product for sale, for the **market.** Which means that the nature of the mode of production as a whole starts to be transformed and that the socio-economic unit, the fief, starts, consequently, to loose its independence vis - à - vis the other units. And this despite the fact that this form of rent continues to be based on the same foundations as the rent in kind, since the direct producer remains a non - proprietor of the land and has to cede to the landlord a part of his surplus appropriated by the land owner after being transformed, on the market, into money. As for the means of production, other than the land and the cattle, they pass to the direct producer in a **de facto** manner at a first stage, and **de jure,** at a second one. This property becomes, then, a preliminary condition of the monetary form of the rent of land.

The transformation of the rent in kind into a money rent is related to the development of trade, to that of urban industry and that of commodity production in general, and, consequently, to the circulation of money. It supposes that commodities have prices on the market and that these prices oscillate, more or less, around their values (a matter which was not necessary under the previous forms of rent, since,

from the moment that commodity production starts to have a decisive rôle, it is necessary that each producer obtains from exchange an equivalent to what he cedes)[37]. But, we are still within the framework of simple commodity production.

It is clear that this transformation takes place within the feudal mode of production itself, though in interaction with other factors like development of cities and trade. The transformation is effectuated through the contradiction between the peasants and the landlords around the surproduct. Since, with the emergence of the rent in kind it becomes possible for the direct producer, as we have seen, to appropriate for himself a part of the surproduct to be used, potentially, for a further expansion of production.

To increase that part of the surproduct, the peasants (especially the priviledged category among them that became tied to the market in a direct manner) start to practice pressures on the landlords to transform the rent in kind into a money rent. These pressures were crystallised into peasants' revolts that were carried out by the richest peasants (e.g., the peasants' war in Germany in 1524 - 25 and the peasants, revolt in England in 1531). As a result, the production of the surproduct appropriated by the direct producers and especially the big peasants, aug ments. With such increase, coupled with

the growing possibility that some peasants extend the superficie hired by them, increases the capacity of the rich peasants to accumulate. In such a way the process of social differenciation among the peasants continue : the rich peasants, tied directly to the market, who accumulate **capital** in agriculture; and the small peasants, the poor, who find themselves subordinated to rich peasants, the latter employing the former for **money wages.**

Around this economic sturcture, the elements of the ` superstructure | in the feudal countryside are interlaced, elements which radiate starting from the type of land propriety dominating the social scenery. The rights of land property being heirarchised. They entail a pyramid of relations of subordination and loyality having as basis the relations between the peasants and "their" landlord, as we have seen. We have afterwards the rest of the pyramid moving towards its summit, the relation between the members of the class who do not participate to the process of social labour, that is the class of the landed aristocracy. The landlord, in his turn, to protect himself and his subordinates and increase their number, makes himself a vassal to a more powerfull landlord (the power of the latter is a function of the superficie of land he dominates directly and the number of his vassals). In

return, he is subjected to a number of obligations[38] vis-à-vis his protector, materialised, in the last resort, in a part of the rent paid by the peasants. And so on, the relations of subordination and loyality succeed until we reach the king or the emperor, the summit of the social pyramid, possessing, in principle, a nominal power or authority, himself subordinated, at least religiously, to the Pope. This pattern of relations among the members of the class of landowners, makes from the feudal system a system without a centralised State : a system born from the state of anarchy bequeased by the fall of the Roman empire and the Germanic invation. But, this anarchy will have to be limited and even organised. Since the system needs, for its existence, a minimum of aspects of social solidarity, obligations and beliefs : the family solidarity is intensified; the class solidarity between the members of the nobility is fortified by the habits, the ceremonials and the material and moral apparatus of the chevalry. And, at the end, comes the relegious sanction. The Church, which is founded, too, on a pyramidal organisation having the Pope, with his nominal authority, at the top, and recruiting its superior members from the nobility (the brothers of the nobles and their younger sons) and its infeior members from the free peasants; this Church represents an integral part of the feudal

system. It owns big fiefs.[39] It intervenes to limit violence among the nobles themselves (a violence which weakens their class solidarity). It cares especially to limit the violence of the peasants and assure their moral subordination, as a class assuming the vital function, the function of producing for everyone: to guarantee its own subsistence, to insure the living of the noble knights who defend "everyone" and make live the clergy who pray for "everyone".

It comes out from all this that it is in the nature of the Feudal mode of production that the society is subdivided : it is divided horizontally into fiefs which represent quasi independent socio-economic units. And, the socio-economic unit, the fief, is divided, in its turn, into small production units (the peasant families). The society is also divided vertically, in the form of a seires of dependency and subordination which makes it difficult, if not impossible, that the society has a really efficient center.

This subdivision and that absece of a center were such that it made it impossible for that mode of production to develop rapidly and by its proper forces. It is for this reason that the horizontal extension, i. e., the extension of this mode of production over lands that were fallow before, represented the only way for this type of social organisation to expand

without losing its characteristics. Such extension has continued for different motifs : enlarging the property for the landlords and the Church, "bargaing" by the peasants to have better conditions on new lands. It has continued uptil the 13th century leading this mode of production to its limits, to the maximum it can give. Having exhausted the available space, the dominant relations of production would not allow the exploitation of the socio-economic unit, the fief, under the form of big production units on which the productivity of labour can increase at a rate which copes with the always increasing needs especially those of the landed aristocracy. With the limits of this mode of product having been reached, the crisis of feudalism is announced, a crisis of which it never got cured and which continued uptil the 15th century to become the crisis of its disintegration, with the emergence of another mode of production in agriculture itself, a mode of production which will no longer be based directly, in its becoming, on land, but on the urban industrial production as a monetary commodity production having its center in the city.

The last centuries of the Roman empire and the barbarian invasion had lead to a massive destruction of a number of productive forces, a deterioration of the agricultural activity, a

reduction of industrial production because of lack of markets and a hinderance or irrigularity of trade. This entailed the disappearance of certain cities and the deterioration of what was left. It follows that the city did not play, at the begining of the feudal social formation, but an insiginficant rôle, having an existence on the margin of a society based on agricultural activity and where the socio-economic unit, the fief, is almost self - sufficient.

Meanwhile, the gradual increase of the productivity of agricultural labour has given rise, at a certain level, especially in the rich fiefs, to an agricultural surplus which exceeds the alimentry needs and gives, hence, a way to a sort of commercialisation to allow for the satisfaction of new needs of the landed aristocrary. This takes place while some cities, especially on the Italian mediterranian coast, continued to practice a commercial activity which did not stop since the Antiquity. Moreover, this activity started to flurish in the 11^{th} century with the decline of the Arab domination on the Mediterranean.[41] Next, came the expansion of trade in the 12^{th} century with the Grusade and the establishment of christian monarchies in Palestine. To this is added the emergence of cities around the commercial activity, especially in the North of Europe. These new cities, which are the

product of villages having a particular site (be it the crossroad of routes or water streams, the neighbourhood of an important Church or a place of pilgrimage) can be considered as markets becoming permanent ones, and whose existence evoques the establishment of contacts between the Italian cities and those of the North, through the construction of roads and canals in Western Europe of the 12th century. Meanwhile, the population of the cities still represents a small minority, not more than 10% of the total population during the period from the 12th to the 15th centries. This urban population represents, at least in the new cities, the "lower depth" of the countryside : the landless individuals living on the margin of the rural society, the vagabonds living on the Church's charity, serfs escaping from the fief and looking for an occosional work in a merchant's or a craftsman's location.

But the **City** is still enclosed in the feudal society and under the political control of its lords. Its life is based on trade and handicraft activities, with a number of domestic industries oriented to simple exchange, especially woolen textiles, metallic instruments (arms included), leather products and wine industries. Many factors have been united to out of the **guild system**(42) the organisational form dominating commercial and industrial activities. For, it has been

indispensable to have a collective organisation to protect the inhabitants of the cities against the nobility of the countryside. It was also necessary to edify places for the public markets, a matter which needs the mobilisation of collective possibilities. Moreover, it was necessary to defend the members of the craft against the serfs escaping from the countryside in an increasing number with an eye on a living in the emerging cities.

The merchants of the city are organised in a guild which guarantees for them the monopoly of the trade[(43)], and defines the rules govering their activity. Moreover, it protects its members, grants them subsidies and helps their families whenever necessary. **It is only the merchants who elect the civil servants of the city.**

In the same manner each handicraft is organised in a guild which excludes the foreigners from practicing the handicraft. Each member carries out his activity in a small workshop representing an integral part of his household, where the raw materials are transformed through the utilisation of simple instruments of labour owned by the craftsman. It is in this workshop that the products are sold. The owner of the workshop, the Master, has to respect the rules of the guild which fixes to him the characteristics which the raw materials

must have, the production methods to adopt, the length of the working day and the sale price. Hence, no competition between the members of the guild. These rules define also the working conditions within the workshop : with respect to the **compagnons** who seek to learn the handicraft. They work in the interest of their master for a period of seven years (starting at the age of 7 - 8 years). In return, the master has to lodge them, dress them and provide them by an ensemble of instruments. He understakes to teach them the craft until they become free labourers, i. e., **foremen,** whom the master employ for a daily wage. These foremen can become, in their turn, after a number of years, masters and join the guild as members.

Within the city, at this stage, the conflict between the merchants and the masters of the handicrafts mainfests itself. But, with the increase of industrial products in commercial circulation and the expansion of industrial activity, the merchants began to dominate the industrial activity. This does not prevent some of them to become industrial masters, and some industrial masters to produce for the market to which they become directly tied (playing, accordingly, the role of merchants as well). Industrial production starts to witness the development of productive forces and more transformation

towards commodity production and capaital accumulation, though still at a limited scale. This development of the productive forces is realised thanks to the introduction of new production techniques and new instruments of labour (transmitted by the Syrians of the East of the Mediterranian to Western Europe by the arabs though Spain and the contacts between Constantonople and the Italian cities)[44], as well as through the crusade which has fortified the contact between the East of the Mediterranean (center of ancient civilisations and the arab civilisation) and Western Europe. New products, for which new industries will emerge, were introducd. Thanks to the introduction of new production techniques,- the productivity of labour augments (such as new colours & dyes coming from the Levant, in textiles industry). The increase in the productivity of labour was due, too, to the extension of hte market for some industries (as in the case of the glass-making industry of Venice), to the transfer of qualified labourers from the East (like what Venice did when it conquered Constantonople at the beginning of the 13th century). Finally, new centers of arms industry are built up, a matter which pushed for the division of labour within this industry.[45] To this is added the effect of all these factors on the pattern of consumption (the assortment and quality of consumption

goods) in the West European societies, expecially that of the nobility and the inhabitants of the cities.

In such way, the city, which was instaured within the feudal society, develops itself, a development which shows the limits of this type of society. For, with the horizontal expansion of the feudal mode of production in agriculutre, it exhausts its possiblities to increase production in respense to the incrasing needs (especially those of the nobility) reflacted in a rising demand for industrial consumption goods. A rise which increases the pressure on the peasantis through the insistence of the nobles to increase the land rent, a matter which pushes some peasants to abandon the land (when their revolt against the landlords fails); then the serfs find in the cities the possibility of a liberation from the Yoke of the feudal relation of production. This is to be added to the struggle between the peasants and the landlords around the transformation of the rent in kind into money - rent, which means the possibility of a change in the relations of production for the peasants who remain in agriculture.

With the development of cities, their inhabitants distinguish themselves from the inhabitants of the countryside, and begin to have their proper organisation. At a first stage, they get rid of the obligations which continue to

overwhelm the inhabitants of the countryside, and they acquire, through their struggle with the feudal princes (often in exchange of monetary payments) the right to organise and administer their city in a way which facilitates their economic activity and life. They struggle for the liberty of ownership that the prince cannot confiscate, the liberty to conclude transactions and that of changing one's place or residence. Liberty becomes, thus, synonymous to the city as the subordination of the serf remains synonymous to the countryside. The inhabitants of the city develop administrative, legal and tax systems which correspond to the nature of their activities. They take in hand the police function within the cities as well as that of defense against foreigners.

The inhabitants of the city[46] acquire, hence, a privileged status compared with that of the people of the countryside. This privileged status is suported by an economic relation which allows the city to exploit the countryside through the monopoly prices imposed by the city thanks to the guild organisation of trade and industry as well as through commercial fraud and the usury. It becomes, then normal to look at the inhabitants of the countryside as people "who exist to be exploited"[47]. Here, it is a matter of **contradiction between the town and the countryside.** This contraiction

appears **dierctly** between the inhabitants of the city in general, the merchants in particular and more the industrial masters, on one side, and who appropriate the agricultural surplus, that is the nobility and the clergy, on the other side.

This contradication appears **indirectly** between the inhabiatants of the city and the peasants. And, for these peasants, the contraditiction appears directly, at a second stage, as far as they produce a part of the product of their labour under the form of commodities to be sold on hte market in order to pay the monetary rent, i.e., as far as they effecuate a monetary commodity production. This contradiction will represent **one of the principal contradiction along the period of transition from the feudal social formation to the capitalist social formation.**

But this does not mean that the inhabitants of the city represent one single homogenous class, since we can distinguish, within the society of city, the high stratum of the commercial class, the small retail traders, the craftsmen and, finally, the working class. While the first group governs the city, and the second has, at a second phase, the right to elect the civil servants; the workers have not "any part in the government. They neither have the right to own a shop or a workshop in the city.[48] The cities "do not receive with

enthusiasm the troubled serfs coming from the countryside, although they increase the number of the workers. And, the inhabitants of the city sees badly their tentatives to buy a piece of land in side the city"[49]. Accordingly, the class structure of the city's society is founded principally on two classes : one, composed of big merchants and big industrial masters with the contradictions existing among them, this class owns and governs; the other which niether owns nor governs but works, is the working class. Such class structure is based then on the **contradiction between these two classes**[50]. This contradiction will be the principal dialectical relation of the capitalist social formation.[51]

In this way, we see the development of the simple commodity production within the feudal social formation, in its countryside as well as its cities. And, with the development of this type of production the differenciation within the peasants and the craftsmen is born, through the contradiction between the merchants and the industrialists, on one hand, and that between the peasants and the aristocracy, on the other hand. With the development of this differenciation, new relations of production are born : between the rich peasants directly tied to the market (with the possibility of accumulating a part of the surplus) and the workers - artisans.

These are the capitalist relations of production which appear, in their embryonic form, through the crisis of the disintegration of the feudal society. The differenciation within the disintegration takes place very slowly and over quite a long period. It is why the capitalist mode of production does not emerge in a clear cut form from the feudal mode of Production. It cannot do so except when the disintegration of feudalism attains an advanced stage, as we will see in the following section.

If this feudal mode of production represents, during the different stages of its existence, the economic basis of the European society of the Middle Ages, it finds its **adminstrative and intellectual expression in what the Church and the clergy produce.**[52] The Church owns a system and a unity which compensate the anarchic tendancy of the nobility and provide the christian world, despite its vast space and the parcelled existence of the fiefs, a commun foundation for power. Although the nobility and the clergy are in conflict with respect to certain questions, each of them has felt his need for the other for maintaining this type of social organisation of which the Church is an integral part.

Effectively, the Church does not start the construction of an organisation which dominates the life and thought of all the

inhabitatnts of the christian European world before the 10th century when it **reforms the monachal system.** (53)

This system, as we have already seen, is **Feudal** Beside the fact that the clergy recruits its superior members from the feudal families, their inferior members open new lands in the interest of the Church, representing at the same time the spear head of the feudal expansion. This canonical organisation monopolises the administration of the feudal society; a monoploy which gives the Middle Ages thought a certain unity and a certain cohesion, but which imposes at the same time dangerous limits on that thought itself. In other terms, it is a monopoly which gives the canonical thought, at the same time, the basis of its force (its cohesion) and the roots of its weakness (in limiting its proper horizon). The general vision of this canonical thought was, in what concerns Man, that life in the society represents the life in this world. This life is not but a passage and a preparation for another life, an eternal one, in the paradise or in hell. This general intellectual attitude of the Church, in what concerns social life, does not prevent it, at a practical level, neither from paying all attention to this life "on earth" nor from preorccupying itself with the maintenance of the feudal system.

The canonical thought, with all its details, dominates the

intellectual life of Europe during the first stage of the expanding existence of the feudal mode of production, based principaly on the agricultural activity, with the Church as the largest land proprietor. At a second stage, this of rise of cities and their development, the preoccupation of the Church with an essentially rural economy places it, starting from the 12th century, in a situation of opposition with the interests of "temporal society", of merchants and artisans. For, during this second stage, which was the stage of the crisis of the feudal society, appear, under the influence of the Arab thought(54), new ideas which the Church considers as heresies. In the begining,the reaction of the Church manifests itself in the form of tentatives to destory this thought by violence.

Afterwards, the Church changes its attitude in trying to embrace certain new ideas employing changes which do not go beyond the framework of the principal dogms.(56) With time, the Church feels the need, in its keeness to safeguard its position in the feudal system, to mobilise all its intellectual possibilities against the new ideas of the urban thought. This mobilisation finds the apogee of its fruits in the thought of the School Men of the Church, **the Scholastics,** which flouishes in the newly born universities of Europe(57), (universities

based principally on the theological teachings for the formation of the members of the clergy) and specially the thought of Saint Thomas Aquinas.[58] Hence, their instenctive affinity with Aristotle, this grand defendant of the "Order".

In its essence, the Scholastic thought presents itself as an attempt to conciliate religion and philosphy, the faith and reason, i.e., the revelation and the attempt to explain the universe on the light of human intellegence. This attempt completes, effectively, the intellectual process which started in the Antiquity to be pursued by the Islamic thought from the 9th to the 14th cenutries.[59] This intellectual process is based on the deductive aspects of Aristotle's logic, and uses some of his arguments while envisaging the problems of the feudal society. This thought, which is fundementally theological, has allowed the Church to continue its pressure on the new thought of the city society during three more centuries.

Within this theological thought, a certain economic thought is embodied, a thought which oscillates, uptil the 14th century around two principal ideas:

- a first idea, the less important from the viewpoint of its theoretical preception, has to do with the condemnation of **interest** on bases similar to these pronounced by Aristotle.

- the second idea, the more important, is that of the **just price** : for each commodity exists a just price based principally on the **cost of production.** Starting from this cost, the seller can realise, on the market, a reasonable **profit** which allows him, and his dependents, to live according to the **standard of living** of the member of his **class** (a class vision). To seek the realisation of a higher gain is considered as against the christain morality. Here, the attempt is to determine the "**just**" price and not to **explain** the "current" price, the **market price.** Nevertheless, starting from the cost of production to determine the "just" price reflects that the attention of the Scholastics is concentrated on the domain of **production.** But, which production?

Simple commodity production : where the production activity is carried out by independent individuals selling a part of their products on the market to obtain other products to be used directly by them, for their consumption or reproduction? But, then, what about the merchant and the prices at which he sells the commodity ? In the begining, the Scholastic thought, following the path of Aristotle, condemned trade as activity. With the expansion of trade, the Scholastics

save the merchant from moral condemnation if the selling price is higher than the purchasing price in two cases : the case where the merchant uses the monetary gain to attain a necessary or a noble objective (such as supporting his family or helping the needy); and the case of a person who buys without having, at the time of purchase, the intention to resell, but with this intention occuring to him later on. In such case, the merchant can resell the commodity at a higher price, either after having improved it in one way or another, or after having supported the risk of its transportation from one place to another, or still if the price has changed with time. In other words, the merchants were exempted, according to the Scholastics, from moral condemnation if they behave as the small producers do.

Such is the essence of the idea of "just price". Although it finishes (with the expansion of trade, the generalisation of commodity production and the spontaneous organisation of the economic activity by the forces of the market) by loosing its power on the spirit of men, this idea has the merit (in basing the just price on the cost of production) of keeping the orientation of the reflection on "value" in the domain of production. And it is this which makes it the most influential

idea left by the Scholastics in the domain of economic thought.

We see, then, that in the Scholastic economic thought the distinction is made between the **interest** (the income of the money lender), that was condemned at a first stage, and **profit,** appearing first in the domain of commerce : condemned at a first stage, accepted at a second stage with conditions relative to christian morality and almost justified at a final stage.

The last phase of the Scholastic economic thought annonnces, in the 14th century, the begining of an economic thought preoccupied with problems of : value and prices, monetary problems especially with respect to the metallic money, of exchange with abroad and the international movements of gold and silver, and of interest and profits.(60) But, these are problems relative to phenomena belonging to the nascent capitalist mode of production, which started to impose itself on thinkers to witness, with its rise and development, the birth and development of Political Economy as a science.

Section II - The birth of Political Economy at the Capitalist era

- Time : from the 15th century to the middle of 19th century.
- Place, Western Europe, especially, Britain, France, Spain (and Italy).
- Two Phases :
  - Phase I : From the 15th to the middle of the 17th century :
    - Transition to the capitalist mode of production in agriculture and industry - With a vital rôle of trade, internal and external trade.
    - Economic thought : The Mecantile economic thought : paving the road to the birth of our science.
  - Phase II : From the middle of the 17th century to the middle of the 19th :
    - Further transformation through the industrial revolution - development of money and monetary institutions - creation of the international market, especially through the acquisition of colonies and semi - colonies.
    - Economic thought : the Classical School : delemitation of the object of our science,

elaboration of its method - different theories concerning the economic activity :

- The forerunner of the classical school : in France, the Physiocrats; in England, W. Petty & others - Ex. : F. Quesnay, the father of the Physiocrats.

- The new productive unit and the **cycle of capital as a medium of the cycle of procution :**

* The new productive unit (the capitalist entreprise).

  - privately owned.
  - produces for the market.
  - immediate objective : maximisation of monetary profit.
  - employes wage - labourers.
  - functionning through the forces of the market - tends over time towards a higger size.
  - exists in the different domains of the economic activity : primary (mining - agriculture ...), secondary (industrial) - tertiary (services : trade - banking ...).
  - does not limit itself to the domestic market ----> looks for the international market.

* The cycle of capital :

- starting point : an amount of money previously accumulated, to be used as capital within the enterprise.

- **three** phases of the cycle of capital through which the cycle of production is realised:

  - **phases 1** : the capitalist appears on the markets of productive force:

    * spends his **money capital** to buy the productive forces (labour force & means of production).

    * he appears as a buyer only.

    * he transfers his money capital into **productive capital** (the conditions of production are united).

  - **phase 2** : he leaves the market :

    * now in the domain of production, (a factory or a farm).

    * he uses the productive forces for the creation of new products, for sale, that is commodities having a value bigger than the value of the forces of production.

    * he transforms the productive capital into **commodity capital** : the surplus is **created** here.

- **phase 3** :

  * as he is producing for the market, he goes back to the market, to sell his commodities.

  * if he succeeds in marketing : he cedes the commodities for money.

  * He transforms his commodity capital into money capital, through selling without buying : his surplus (profit) is **realised.**

  * Now, he is back to money capital, with a certain amount.

  * If the money capital resulting by the end of the third phase is bigger than the money capital with which he started the first phase : the result of the cycle is positive : money profit is realised.

  * he can start a new cycle.

  * if, on the contrary, the final money capital is less than the one he started with : loss is realised.

I - The mercantile economic throught : given by merchants and men of the public administration :

* in England : Thomas Mun (1571 - 1641)

  John Child (1630 - 1699)

* in France :	Jean Bodin	(1530 - 1596)
	Antoine de Monchretien	(1576 - 1621)
	Sully	(1559 - 1640)
	Colbert	(1611 - 1699)
* in Spain :	L. Ortiz	(1558 -
	D. de Olivares	(1621 -
	The Italien A. Sierra	(1641 -

- The social thought in general : transfer of the center of interest from the religious to the temporal questions. Within the temporal questions, the economic problems are the object of thinking.

- The economic thought has its independence. It is interested mainly in the **national** economy, i.e., the economy of the nation as a whole.

- The main problem : The **wealth** of the nation :
  - its nature ?
  - where it is produced ?
  - the relation between the nation's wealth and its stock in precions metals?
  - how to increase it ?

- the nation's wealth and the balance of its trade with abroad.

- **What is wealth ?**

  - **for some early mercantilists : wealth is money made of** precions metals : this idea **was** produced **under** the **influence of the big flows of gold and silver from Latin** America to the European countries, directly mainly towards Spain and Portugal and to other European countries (France & Britain) through trade.

  - But, for the main stream of mercantilist thought, wealth is the **products** of the different economic activities in agriculture and industry.

  - Money, in the form of metallic money (precious metals) is the **measure** of wealth.

  - The necessity of money for the expansion of exchange production.

  - Europe does not produce precious metals (gold and silver) : the advantage of foreign trade : to bring in precious metals, to be transformed into money. Accumulated money means accumulated money capital, i.e., possibility of building up more productive capacity,

in agriculture and industry ----> increase in the wealth of the nation.

- **The search for the nature of wealth in the flows of gold and silver through international trade.**

- The **wealth** of the nation represents itself, hence, in the produce of labour and land, and industry. Gold and silver are the **measure of trade.**

- The imporatnce of precious metals comes from the fact that **money** is fabricated out of them - Money :

  - necessary for the circulation of wealth.

  - necessary for war (the period of colonial wars).

  - necessary for **credit,** lending money, especially to be used for the expansion of production.

- To bring precious metals inside the country we have to export commodities : **export** as much as we can.

- And **import** as little as we can.

- The exports exceed imports, the **balance of trade** will have **a surplus** : to use for the purchase of precious metals.

- To export as much as we can means to create an extended market for our commodities abroad : conquer foreign markets.

- To import as little as we can means to keep our domestic market for our domestic production units, in agriculture and in industry, especially the latter, i.e., to protect infant industry from the competition of foreign similar products.

- The expansion of the market (internal as well as external) was the main requirement for the expansion of the new sort of production : production for exchange and the realisation of monetary profit.

- This necessitates the intervention of the State, **such intervention in order to create a surplus in its balance of trade** means :

  * an expansion of the domstic market, which means less barriers inside and more freedom of movement for men and goods (means of transport).

  * acquistion of foreign market, through the acquistion of colonies.

  * assurance of a source of cheap raw materials for the emerging industries.

  * a favourable balance of trade, i.e., with surplus, means an inflow of precions metals ----> possiblity of a monetary expansion.

* monetary expansion based on this sort of expansion of material production means :

  - more money incomes ----> a demand for goods on the market.

  - more accumulation of money capital ----> further creation of new productive capacities, and more employment for the labour force.

- What about price and its determination on the market ?

  - for the mercantilists, it is difficult to find precise ideas about that.

  - we can distinguish the following ideas :

    * they look for the **Current price** in the domain of **exchange,** but the exchange backed with commodity production.

    * in their thought, **price,** the current price on the market, converges with **value.**

    * the distinction between the **utlity** of the commodity and its **value** exists.

    * for the determination of the current price : many answers:

      - the quantity of money in circulation,

- the demand and the supply of the commodity,

- the needs.

- all these factors together.

Phase 2 : Industrial capitalism and the birth of Political Economy as a science :

- End of the 17th century : with the accumulation of money wealth from trade promoted by the new sort of production ----> possibility of expansion in the new sort of industry.

- The accelerated rythme of industrial construction: the industrial revolution.

- Concomitant with it :

  * a limitation of the organisational rôle of the State (with the new private entreprise approaching its maturity), more freedom to the entreprise.

  * a contraction of the big commercial companies.

  * a distintegration in the guild system.

  * a disappearance of monopolies giving more way to competition.

- The industrial revolution is realised through qualitative transformation in :

  - production techniques : application of science to production - invenetions and innovations - transformation from manual industry to mechanical one.

  - in the modes of organisation of entreprises : from the workshop to the factory - the division of labour within the entreprise - the generalisation of wage labour.

  - in the size of the productive unit : a tendancy towards the increasing size of the entreprise : the transformation is realised through the accumulation of money capital which became possible to borrow from the emerging banking system.

- The industrial revolution evoques a second agricultural revolution :

  - the agricultural activity uses industrial means of production.

  - increase in the productivity of agricultural labour and hence money incomes in the conutryside, which means an increasing demand for industrial commodities, that is, an expanding market for the new industry.

- at the same time, a bigger agricultural surplus means:

  * more foods to be commercialised in the new urban center,

  * more raw matrials for the new industries.

- For the economic process as a whole, the economic scenery in its way to be dominated by a sort of entreprise producing, in all the fields of economic activity, for the market : provoking a process of formation of the different sorts of markets : a market for wage labour, markets for the material productive forces, markets for the different products, a market for money and credit : all these markets intervening and interacting to create a national market poushed, by the expansive nature of capital, to be extended beyond the national borders, to have an international horizon :

  * the market becomes the confluent of the results of the **regular repetition** of the economic activity,

  * with the rapid expansion of industry the cycle of the repetition of the economic activity is shortened, with the cycle reoccuring more frequently, a matter which helps the research worker to notice that **economic**

phenomena are governed by regular objective laws.

- The intellectual atmosphere is that of the crystallisation of natural sciences, with the elaboration of the method of scientific research, and a general belief that this method can be used for the formulation of knowledge concerning social phenomena.
- On the level of economic thought, Political Economy is born during this phase 2, thanks to the intellectual efforts of the Classical School and its forerunners in Britain and and France.- the Forerunners :
- **In Britain** : W. Petty (1623 - 1687) - D. North (1641 - 1691) - John Locke (1630 - 1714) - John Law (1671 - 1729) - D. Hume (1711 - 1776) - J. Stewart (1712 - 1780).
- In France : The Physiocrats - F. Quesnay (1694 - 1774) - D. de Mirabeau (1715 - 1789)...
- Here, we will limit ourselves to the economic thought of F. Quesnay who was aware that it was the question of building a new science.

François Quesnay (*)

"Quesnay, if he got rather more than his due as a patron saint of economic liberalism, has to this day been receiving less than his due as a scientific economis". [1]

J. A. Schumpeter

It is in the analysis of François Quesnay that we find the first attempt to conceive the whole economic system in the form of a circular process; a process of production and reproduction of the social product, a process with different interdependly linked sectors [2].

Weaponed with certain philosophical ideas and a certain approach to the study of social phenomena, Quesay drew out of the reality of the eighteenth century French society an abstract picture of the economy. Through the analysis of this picture he endavoured to find out, in the process of social labour, the origin of the social product; to pursue this product in its distribution between different social classes and throughout the process of circulation which should take place

(*) Professor M. Dowidar.

in such a way that the social process of reproduction could be secured. His analysis led him to conclusions concerning the production and exchange of social wealth and their development. It has culminated in the brillant schematic representation of the whole social process of production, circulation and reproduction : the Tableau Economique.

An understanding of Quesnay's scheme of reproduction is almost impossible if the proper, factual as well as analytical, context is lacking. Therefore, an attempt to furnish such context will precede the study of the scheme.

The France of Quesnay:

The period of the late seventeenth and the first half of the eighteenth centuries was, for France, a period of economic and social crisis at the center of which was the problem of the social order. A crisis that took place against the background of almost continouous wars. Generally speaking, the situation by the mid-eighteenth century could be characterised by a qualitative importance of the new capitalist economic institutions that were forcing their way through within the framework of a feudal society, a society that was economically exhausted not only by the virtue of its self-destruction when ceding the place to a new social

formation, but also in consequence of the extraordinary burdens of wars.[3]

Economically, agriculture was the dominant activity. It engaged the great majority of the active population and represented the main contributer to national output. The dominant social form of the unit of production was the peasant family cultivating a small holding. Meanwhile, agriculture on the basis of large-scale farming was already occupying, in 1757, one seventh of the cultivated area, mainly in the provinces of "Normand, la Beauce, l'Ile-de-France, la Picardie, la Flandre française, le Hainaut et peu d'autres".[4] On these farms capital and wage-labour play the crucial rôle. Productivity is much higher than on small holdings because "le riche fermeir, qui cultive en grand, qui multiplie les dépenses pour augmenter les profits, ... fertilise les terres, multiplie les bestiaux, fixe les habitants des campagnes and therefore fait la force et la prosperité de la nation".[5]

Industrial output was mostly produced by two types of industrial producers; the artisans and the domestic rural producer. The latter played the first rôle in the most important industry of the time : textiles[6]. Industry was subordinated to commerce, especially on the international market. In the surroundings of grand ports, a mercantalist concentration of

industry took place[7]. These centers represented the nucleus of further industrial development on capitalist basis. But so far, it is the artisans that dominated the industrial scene. And for Quesnay, they were a part of the "sterile class".

It was in the domain of commerce that capitalist initiative was most active. This applies with special rigour to foreign trade. Internal trade was more or less confined to grains, mainly cereals. But the big push was realised by maritime trade. Between 1716 and 1756, the value of total foreign trade has almost tripled.[8] "Ainsi s'édifièrent dans les ports et les villes commrçantes de très grandes fortunes .... les richesses amassêes servainet à la bourgeoisie à acquérir des terres, signe de supérioritê sociale dans cette société encore féodale, et ainsi à financer la grande industrie naissante. L'essor commercial précédait le developpement industriel".[9]

Despite the development of the capitalist mode of production in these different activities, agriculture, with its traditional form of exploitation, was the essential productive center. It not only supported the great majority of the population, peasants as well as aristocrats, but also nourished industry with labour force and raw materials.[10] The profitable trade of cereals constituted the most active branch

of internal trade. From here, agriculture acquired its dominant place in Quesnay's analysis.[11]

The picture of the development of the capitalist mode of production was obscured by the still reigning taxes and other levies, the major part of the agricultural output (in real or in monetary terms) was going to the socially and politically dominating classes : grand proprietors, nobles, the clergy and the high bourgeoisie. Among these, the grand proprietors ranked high, for they not only owned the majority of land, occupied high civil, military and ecclesiastical positions, but also possessed the amlost totality of French capital at a time when movable wealth was subordinate to estate property. While the situation of the agriculturists was still characterised by financial indebtendness, that of the working class in agriculture (les brassiers), in industry and trade, by the fact that it received just what maintains its subsistence, the proprietor class appeared clearly as the center of financial and authoritative decisions, as the class that controls all economic activity. [12] Hence its strategic rôle in Quenay's analysis.

The philosophical ideas of Quesnay and his method:

If the sixteenth and the seventeenth centuries, and especially the latter, were the centuries of the natural science,

with their development culminated in the synthesis of Newton, the eighteenth century, "le siècle des lumières", was the century of political and economic theories, in whose field development ported the printed mark of achievements in the domain of natural sciences.[13]

philosophers
The "philosophers of that epoch have kept that sense of natural order legated to them from the Scholastic thought. Nature determines an absolute order, universal and immuable, an order constituted by the Supreme Being and within which the interaction between the physical and the moral worlds is effectuated by divine intervention.[14] Quesnay shared with the "philosophes" this idea of natural order.[15] To him, this version of the natural ideal order was moulded with the idea most popular at the time, that of "La raison". The objective laws of that "ordre naturel" (to which there corresponds in the world of real phenomena an "ordre positif") were to be discovered by the enlightened reason,[16] "with all its uncritical belief in progress, but without its irreligious and political fangs".[17]

According to Quesnay, the economic sysem constitutes an order of facts that are submitted to certain physical laws derived from the nature of things. These laws form a system, a

science. They have the Supreme Being, God, as author.[18] They represent a part of natural laws and are "les meilleures possibles". Hence, economic phenomena are governed by physical, objective and materialist laws[19], but they are eternal[20], and from here comes Quesnay's unhistorical approach to social systems.

So much for Quesnay's system, a word on **his method of anlaysis** is quite in order. Quesnay's method was an experimental one. He analyses the economic phenomena as observed in the real world with the purpose of finding the objective laws, independent from the will of man, that govern them. The starting point is always reality, reality in its totality which is an universal one.[21] From this reality or totality we can abstract what represents its essence, we abstract the part from the whole (the concrete) : In his attempts to do so strict rules are to be followed, namely : "la première est de ne jamais rien supposer au delà de ce que l'expérience nous instruit en toute rigueur, and "la second .... de ne point faire valoir par un simple enchaînement de consequences, les vérités que l'expérience nous découvre".[22] In the Tableau, we find that the conclusions derived from the analysis of such an abstract image, with the mechanical adjustments between its different elements, are quantitatively represented in such a

way that the whole relation between economic agents take the form of mechanical adjustment of quantities subject to pressures and tractions".[23]

The economic system analysed by Quesnay:

We said that Quesnay has drawn out of the reality of the eighteenth-century French society an abstract picture of its economic system. We add that the components of such picture leave us with **an abstract representation of the nascent capitalist mode of production forcing its way through within the framework of feudal institutions**. The capitalist nature of the economic system analysed by Quesnay shows itself in the domaine of production as well as that of circulation.

As for production, if agriculture is the "source unique des richesses", it is not for Quesnay traditional peasant agriculture, but agriculture that is carried out:

- by a class of farmers (the only productive class) employing wage-labour and aiming at profit maximisation.[24]
- on the basis of "la grande culture", when fixed capital becomes more important and more advantageous.

His keen desire to see a rationalised French agriculture -

on the image of the English agriculture as visualised in "De la Philosophie Rurale", and as it was already practiced in some of the provinces of France - shows itself every now and then in his works right from the early times of his interest in economic problems.(25)

The capitalist nature of the process of circulation he was analysing is reflected in the following two characteristics :

- the creation of a "produit net" and its appropriation by a certain class. Here we have a clear distinction between the creation of the economic surplus and its appropriation.
- the curcial rôle - curcial for both the circulation and the reproduction of social product - played by the expenditure of the "produit net" as performed by the class of proprietors.

A process of circulation having these two characteristics is of a capitalist type, though marked, as it was, by the archaic stamp of feudalist relations of production.

In this process of production and circulation analysed by Quesnay, the owner of land appears as the true capitalist, since it is he who appropriates the "produit net". Hence, in Quesnay's analysis, "feudalism was made bourgeois", and "bourgeois society given a semblance of feudalism".(26)

Quesnay : on the production and development of wealth:

Though presented by means of disconnected sketches, his concepts on production, circulation and development show that Quesnay possessed a comprehensive analytical scheme. In what follows, only the main premises of such scheme will be pointed out :

- Contrary to mercantilist[27] view, "l'argent n'est pas la richesse dont les hommes ont besion pour leur jouissance. Ce sont les biens nécessaires à la vie et à la reproduction annuelle de ces biens mêmes qu'il faut obtenir". Money serves mainly as a means of circulation of goods, and its quantity "ne peut accroître dans une nation qu'autant que la reproduction annuelle des richesses elle-même s'y accroît".[28]

- Again contrary to mercantilist view, wealth is created in the domain of production and not in the process of circulation.[29] And here it is material production that counts. His analysis runs in terms of physical terms and not in value terms, i.e., in terms of the creation of use-values and not the creation of values.

- Agriculture is the source of all wealth.[30] It is only in agriculture that Nature enables human labour to produce more than its "strict nécessaire". The economy is looked upon as an engine that is fed materials from the womb of Nature. The act of drawing these materials (agriculture) is the only productive one. But other activities that merely transform them do not add to the wealth of the nation. Accordingly, among all sorts of labour, only that spent in agriculture (that is agricultural labour) is productive, in the sense that it produces a sum of use values larger than that consumed by the labour-force during the period of production; a "produit net" results. But it is the producitivity of the earth that enalbes that kind of labour to do so. Thus the "produit net" appears as a gift of Nature that represents a part of the income of the nation, and is appropriated - in the form of land rent - by the "classe de propriétaires"[31] , a class that does not participate in the act of production.

- The productivity of agriculture is a function of :
  - the rate of investment, and
  - the economies reaped from "la grande culture".

Impressed by the fact that his farmer - enterpreneurs could not start upon their careers unless they were provided with all

sorts of thing **before-hand,** Quesnay **introduced capital into economic theory** as wealth accumulated previous to starting the production under consideration. In addition to his analysis of the material elements of which capital consists during the labour process, Quesnay examined the forms which capital assumes in circulation (fixed capital, circulating capital[32], even though he gave them other names), and in general the connection between the process of circulation and the process of reproduction of capital. Quesnay, however, cared little to generalise his theory of capital, particularly significant as a creative contribution[33], to cover other branches of economic activity.[34]

- For Quesnay, a distinction should be made between productive and non-productive consumptions[35], the former being the consumption of materials and goods necessary for the production of the "produit net". It is the equivalent to intermediary consumption (as defined in French Social Accounting) plus all the consumption of the workers and their families (Produit net = total agricultural production - produtive agricultural consumption)[36]. Non productive consumption is for Quesnay, that necessary for the maintenance of classes others than the productive one. Within

its limits, Quesnay distinguishes "les beins de luxe", luxurious goods, from the "biens de subsistence",[37] subsistence goods

- in the process of social production and circulation, distribution is determined by the pattern of the social relations of production. This is quite clear in the fact that the "produit net" is appropriated by the "classe des propriétaires". Quesnay's theory of wages centered in a minimum - of - existence (strict nécessaire) proposition.

- as for development, it is no exageration to say that the transformation of the agricultural economy of France from backward "petite culture" to the prosperity - creating "grande cutlure", was the main preoccupation of Quesnay[40]. According to him, economic development is conditionned by the expansion of agriculture, "car l'augmentation des richesses assure celle de la population; les hommes et les richesses font prospérer l'agriculture, étendent le commerce, animent l'industrie, accroissent et péppétuent les richesses. De cette source abondante dépend le succès de toutes les parties de l'administration du royaume".[41] On the other hand, it is agriculture that furnishes other activities with labour - force. In the absence of the population growth, this is made through replacing small - scale agriculture by large - scale farms, since "la petite culture, qui se fait avec des boeufs par défaut des

richesses, occupe beaucoup plus d'hommes et profite beaucoup moins que la grande culture".[42]

For agriculture to develop, large - scale production, with its intensive use of capital and advanced techniques must replace small holdings and the infra-structure of public utilities must be laid down : "que l'on facilite les transports des productions et des marchandises de main d'oeuvre, par la reparation des chemins, et par la navigation des canaux, des rivières et de la mer.[43] On the demand side, an extended domestic market must be secured. In such market, competition must rule[44], since for the production of a "produit net" in agriculture, "un bon prix" (la valeur vénale) must be received for agricultural products' such price cannot result but from the free play of competition and unrestricted international exchange[45]. If the absence of monopolies, in the domain of commerce, is the condition of the realisation of the "produit net", since "plus les productions sont vendues à haut prix, plus la culture donne de produit net", it is the absence of competition that gives a "produit net" in industry. It is monopoly that enables the manufacturer to sell his products at a price higher than the cost of production (prix de revient) and realises "profits". Hence, industrial profit is explained in a mercantilist fashion, as a profit of alienation.[46]

Furthermore, a certain level of effective demand has to be guaranteed. The private component of this effective demand will be partially secured if "on ne diminue pas l'aisance des dernières classes de citoyens", otherwise, "elles ne nourraient pas assez contribuer à la consommation des denrées qui ne peuvent être consommées que dans le pays, ce qui ferait diminuer la reproduction et le revenu de la nation"(47). On the public side, the effective demand will be assured if "l'administration des finances, soit dans les dépenses du gouvernement, n'occasionne pas de fortunes pecuniaires qui dérobent une partie des revenus à la circulation, à la distribution et à la reproduction".(48)

Finally, Quesnay denounces all the institutions, fiscal system, taxes, etc .. that hinders economic development, and recommends other measures whose effect might be favourable to progress.(49)

THE TABLEAU ECONOMIQUE

> ***"Chaque fois que je regarde le Tableau .... je suis de plus en plus convaincu que l'idée du Tableau est vraîment une idée force, une idée-maîtresse".***
>
> *Luigi Einaudi*

Having shown the factual and analytical context of Quesnay's reproduction scheme it is time to deal with the scheme itself. Our attempt to do so will proceed under the following headings:

1 - The objective of the Tableau.

2 - The nature of the analysis underlying it, from a methodological viewpoint.

3 - The level of abstraction as shown by the assumptions adopted.

4 - The process of production and circulation, and its mechanism.

5 - The equilibrium in the scheme and its nature.

1 - The objective of the Tableau

Quesnay states that he intends by drawing up the Tableau to "suivre et calculer clairement les rapports de ces classes"(50), the relations between the three classes to which the nation has been reduced. From his writings, an objective of a three - fold nature is quite clear. He seeks :

- to find out the origin of the social wealth; a more precise term, the social product, will be used,
- to show how such product is distributed between social classes, and
- to point out how the conditions of the reproduction of such social product are realised throughout the process of circulation. Clearly, if the social product is to be reproduced, social capital, its prerequisite, must be reproduced.

It would never be too much emphasised to repeat that the objective of the Tableau was not the mere circulation of the commodities; the origin and distribution of the social product naturally deserve more attention from Quensay, that rebel against mercantilism.

2 - The Nature of analysis underlying the Tableau

From a methodological standpoint, this analysis has certain characteristics:

1 - Being interested in the origin of social wealth as well, Quesnay's analysis is not only descriptive but also genetical. The result is a Tableau attempting to show how the social product is created and how the social conditions of such creation determine the very form of its circulation.

2 - The Tableau is presented in both real and monetary terms (commodity and money flows), the latter being determined by the former. The essence of the scheme, behind the monetary form, is a circulation in kind.(51)

3 - The analysis runs in macro-economic terms : in terms of the economic relations between large social unit s between social classes. Here, we are acquinted with the simplist form of macro-analysis, the form given by the pioneer of macro-economics, it is "la methode purement **additive,** consistant à decrire les faits au moyen de grandeurs globales obtenus par simple sommation".(52)

4 - The scheme is a simple reproduction one. The magnitude of social product remains unaltered over the successive periods of production(53) (the year is taken as the

temporal dimension of the process of social production). This implies no addition to social capital over time.[54] In other words, the scheme deals with a stationary state Certainly, by stationary state, as the terms implies, it is meant not a method or mental attitude of the analyst, but a certain state of the object of the analysis, namely, an economic process that goes on at even rates, or more precisely, an economic process that merely reproduces itself. Nevertheless, when understood in this sense, it is nothing but a methodological fiction. Essentially, it is a simplifying device. This does not mean that the analysis of such state should be static.[55] A stationary process may be described by a dynamic model : this will be so whenever we make the conditions for stationarity of a process in any given period (and here we are using theoritical and not necessarily historical datings) depend upon what happened to the process in preceding periods. This, we think, is the case of Quesnay's scheme.

3 - The level of abstraction

Thought of a methodological nature, the problem of abstraction deserves a separate treatment, since it is of the utmost importance to bear in mind the level of abstraction at which the analysis is made if we are to appreciate properly the conclusions arrived at. Having determined his task, it is of importance for the investigator, that "in the process of scientific understanding, the essential should be distinguished and brought into relief in contrast with the so-called non-essential".(56) The trascendance and reduction of reality to the essential is the task of abstraction.(57) This is no humble task, and no soverign formula can be given as a guide. In each case, what is considered by the analyst as non-essential is shown by the assumptions that, explicitely or implicitely, underly his analysis. 'The residual picture abstracted from reality represents what he considers as essential. In Quesnay's reproduction scheme, whereas the latter is embodied in the Tableau, the former is reflected in the following assumptions :

a - While taking the whole national economy as one system, Quesnay abstracts it from international trade. He takes a closed economy.

b - Only exchange between social classes is traced. Abstraction from exchanges that take place within each class is made.

c - All exchanges between classes that occur during the period are summed up; they are supposed to take place by the end of the period enabling the complete disposition of the commodities produced during the year and at the sale time placing all the factors of production in readiness when they are wanted as the new production period begins.

d - Secondary, tertiary, etc ... effects of expenditures are abstracted from. This applies only to the summary version of the Tablau (La Formule) to which we will confine ourselves. In the complete Tableau,[58] however, these effects are indicated and their summation effectuated by a method that came to be known in the early 1930's by the nomenclature "multiplier".[59]

c - The system is supposed to function in an atmosphere of free competition.

f - Furthermore, prices are supposed to remain unalterable.[60]

4 - The process of social labour and its mechanism

At such level of abstraction, Quesnay endavoured to show how the social product is produced, distributaded and circulated; all this by few bold strokes in inter-crossing directions given in the Tableau.

The nation is reduced to three classes that are functionally defined :

- the productive class, the class of farmers - entupreneurs : it is the class that produces the total annual output (= productive consumption + "produit net"). Production is effectuated through the use of capital, fixed as well circulating capital. The former, "avances primitives",(61) amount to 10 milliards, depreciates at an annual rate of 10%(62), and is replaced through purchases from the manufacturing class. The latter, "avances annuelles"(62), amounts to 2 milliards. The use of 3 milliards of capital (1 milliards of fixed capital and 2 milliards of circulating capital) permits a total annual product of 5 milliads, a "produit net" of 2 milliards. This surplus represents the excess of the national income over the wage bill.

- the property class, the class of the Soverign, owners of

land and the "decimateurs" (the clergy) : it is the class that does not work but appropriated the "produit net" in the form of land rent. It lives on the expenditure of the economic surplus ;

- the sterile class, roughly equivalent to the bourgeoisie, is the class of all those who work outside agriculture : their labour does not add to the social wealth, it only transforms a part of it. Its use of fixed capital is almost negligible, but it employs a circulating capital (of agricutlural raw materials) of the value of 1 milliards. The members of this class consume, for their subsistense, food products of the value of 1 milliard. All in all, by the end of the production period, manufactured products of the value of 2 milliards are realised in this sector.

In this scheme of class structure, the place of labour is not so clear. It might either be treated as a fourth class (this will be preferable for a socilogoical analysis[63]) or added in proper proportions to the first and the third classes (and this is more conceivable from the viewpoint of the production of social product in general and the "produit net" in particular).[64]

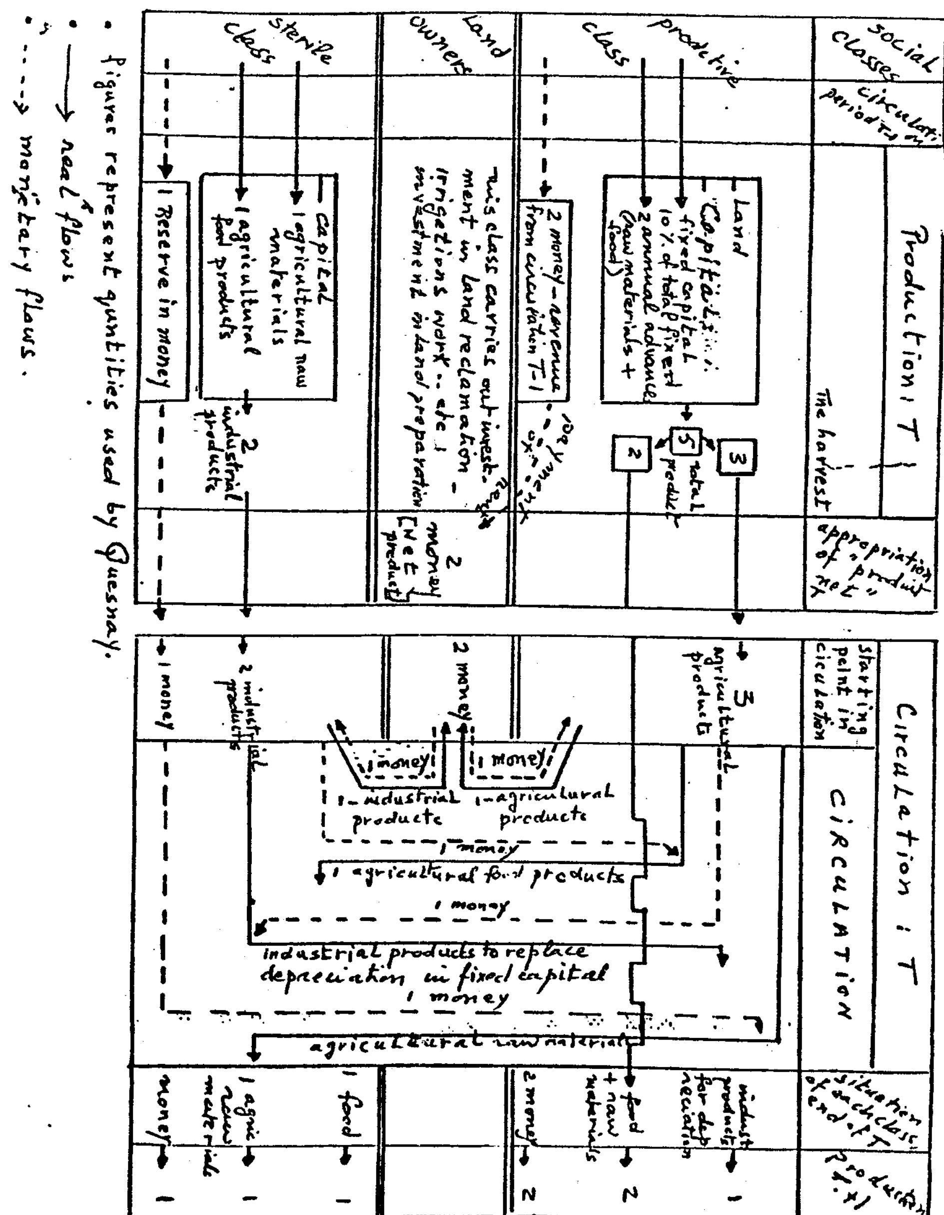
Before attempting to present schematically, the process of production and circulation, it imports to point out that the monetary mass necessary for the circulation of commodities

has not been quantified by Quesnay. However, for him, the quantity of money should be more or less proportional to the national income[65]. This quantity has been fixed at 2 to 3 by Marx[66], and at 3 milliards by H. Woog[67]. As the annualy depreciated part of fixed capital of the farmers is replaced through exchanges with the sterile class, it is more conceivable that the quantity of money necessary for the circulation be of the order of 3 milliards (equivalent of the value of the "roduit net" (2 milliards) + the "avances annuelles" of the industrial class : 1 milliard). In this case, the circulating capital of the sterile class will take a monetary form, whereas it would be reduced to a stock of raw materials in the case we assume a monetary stock of 2 milliards.

The community's cash is supposed to be held by the productive class (2 milliards) and the sterile class (1 milliard).

Now, the terrain is prepared for our schematic representation.

The social process of production, distribution and circulation of commodities will be arbitrarily[68] divided into phases to show how, throughout the process, the conditions of reproduction of social capital, and hence of social output, are produced:


social classes
circulation period T-1
Production: T
The harvest
appropriation of "produit net" T
Circulation : T
starting point in circulation
CIRCULATION
situation of each class end of T
Production T+1
productive class
Land
Capitals:
fixed capital 10% of total fixed
2 annual advances (raw materials + food)
3
5 total product
2
2 money - revenue from circulation T-1
payment of rent
Land owners
This class carries out investment in land reclamation - irrigations work .. etc : investment in land preparation
2 money [Net product]
sterile class
capital
1 agricultural raw materials
1 agricultural food products
2 industrial products
1 Reserve in money
3 agricultural products
2 money
2 industrial products
1 money
1 money
1 money
1 - industrial products
1 - agricultural products
1 money
1 agricultural food products
1 money
industrial products to replace depreciation in fixed capital
1 money
agricultural raw materials
industrial products for depreciation
food + raw materials
2 money
1 food
1 agric raw materials
money
1
2
2
1
1
1
• figures represent quntities used by Quesnay.
• → real flows
• - - -› mone´tary flows.

Out of a total of 5 milliards of agricultural commodities, only 3 are available for circulation, the other 2 remain within the agricultural sector to resume serving in the succeeding period of production. Industrial commodities of the value of 2 milliards enter also in circulation. All commodities available for circulation are subject to the following acts of exchange:

1 - The proprietor class purchases from the productive class agricultural commodities (food) of the value of 1 milliard.

2 - The proprietor class buys from the sterile class manufactured consumption comodities of the value of 1 milliard.

3 - The sterile class buys from the productive class agricultural means of subsistance amounting to 1 milliard.

4 - To replace the depreciated portion of its fixed capital the productive class buys from the sterile class manufactured commodities that worth 1 milliard.

5 - Finally, the sterile class purchases from the productive class agricultural raw materials of the value of 1 milliard.

Through acts 1 & 2, the proprietor class spends its whole reveune. Acts 2 & 3 show that the whole industrial output is transferred to the proprietor class (for consumption) and the

productive class (for the replacement of fixed capital). The sterile class is left with nothing of its own production. According to Quesnay, it neither consumes manufactured commodities nor uses them as fixed capital.

From this scheme, we see :

1 - that the social product is created in the process of production, circulation does add nothing.

2- that a diminition of the agricultural production will render the economic circulation deficient.

3 - that while commodities of the value of 5 milliards have been exchanged only 3 milliards of money was necessary for their cicrulation. The double character of transactions is clear. The circulation of money appears to be determined purely by the circulation of commodities - in fact by the circulation process of capital.

4 - that circulation (during periods) is indispensable if reproduction is to be realised. Within this sphere we notice:

a - that the expenditure of the economic surplus is the motor-force of circulation, from here comes the strategic rôle played, in the process of reproduction, by the class that appropriates it.

b - that exchange between the productive class and the sterile class is the means through which social capital necessary for reproduction is realised, since;

- it is through exchange that the productive class is enabled to replace the depreciated portion of its fixed capital;

- it is by exchange that the sterile class is permitted to get raw materials that would be processed over the next period of production.

5 - that capital takes, throughout the process of production and circulation, different forms. Though not explicit in Quesnay's analysis, we can differentiate between money-capital, productive capital, and commodity capital. As far as the second is concerned, two forms can be distinguished, fixed capital and ciruclating capital. The process of social reproduction is one of circular transformation of social capital from one form to the other.

5 - The equilibrium realised

Eqilibrium is one of the terms that are most used but least precised. Quite oftenly in these studies the concept will be referred to. Therefore, a short digression that aims at some precision in its use may be in order.

First of all, a distinction should be made between two concepts of equilibrium, namely,

- the equilibrium conceived as a real state of the society, whether this state is to be attained through the discovery of the laws governing an equilibrated natural order, or to be realised through the functionning of the economic system, and
- equilibrium as a methodological concept indispensable for understanding the real world.

As a methodological concept, equilibrium, like the other logical concepts, is used in many branches of science :[69]

- in physics, equlibrium is a state of stability between opposing forces or effects. A system is in equilibrium when the result of the forces acting upon it is nul. If these forces produce no motion, the equilibrium is static. But if the system is subject to two opposing processes accomplishing themselves at the same velocity leaving the system unchanged, the latter is in dynamic equilibrium.

- in biology, where the essential fact is the capacity of life to expand, and hence a science which deals with relation of succession between different phenomena, equilibrium is conceived in a manner opposite to that held in physics. Life seems to be a permanent physico-chemical disequilibrium. From the moment nutrition cesses, organisms put themselves in equilibrium with their millieu, and die. The organism has, therefore, to prevent the establishment of the physico- chemical equilibrium, that would have, without it, normally taken place between the material elements constituting the organism. Hence, an organic body is in equilibrium when it develops in harmonious proportions and carries out its functions in a regular manner. Biological equilibrium is the negation of physico-chemical equilibrium.

- in political economy, a system is said to be in equilibrium when each of its elements that tended to divert from its initial position comes back to such position thanks to the action of the very forces of the system. If the economic system is considered as a system of interdependent elements (be it sectors, social classes, agents or mere factors : variables) that mutually act one upon the other or produing a certain set of relations, we speak of its equilibrium when the relations are such as to determine a set of values of the variables of the system that display no tendancy to vary under the sole influence of the facts inculded in those relations per se. These relations define equilibrium conditions or an equilibrium position. In such case, we say that there exists a set of values of the variables that satisfies equilibrium conditions.

An equilibrium could be static, dynamic or stationary, according to the relations from which we start. If these relations link elements that carry the same time subscript (relations at a point of time), equilibrium is static. It is dynamic when the relation carry different time subscripts(70). A stationary state idea is arrived at in the following way : consider a given point of time t.. At this point, all the instantaneous forms of the variables X_t, Y_t, Z_t ..... will be given through the evolution of the system,; and so will all the dynamic forms of the variables. This whole situation determines what will happen if the system is allowed to continue its movement. Will this further movement makes the variables depart from the instantaneous values X_t, Y_t, Z_t .... they have at the point of time considered ? In other words, will the configuration of the system change ? Conceivably there may be some particular situation where no tendency to change exists. Such a situation then is the stationary state, that gives a stationary equilibrium(71).

Coming back to Quesnay, we find that he conceived equilibrium both as a state of affairs and as a methodologoical device, though the latter was not fully grasped by him. He did have the concept of the general interdependence of all sectors and all elements of the economic process in which nothing

stands alone and all things hang together. This conception has been made explicit by the Tableau method : while the idea of representing the pure logic of the economic process by a system of simultaneous equations was quite outside his range of vision, he represented it by picture. It visualised the (stationary) economic process as a circuit flow that in each period returns to itself[72]. This is not only a method of conveying the fact that the economic process is logically self - contained, a distinct thing that is complete in itself, but is also a method of conveying features of its definite sequences in particular.

As the general equilibrium, that is, equilibrium in the economy as a whole in distinction to the equilibrium of any particular small sector of it, necessitates that resources and their use in the production of means of production and consumption goods be equilibrated, Quesnay seeks, in his scheme, the quantitative relations of exchange that have to take place between classes, between total production and total demand, if the economic process is to reproduce itself. For him, general equilibrium is identified with the equilibrium of social aggregates.

Meanwhile, equilibrium is something more. For him, it is the equilibrium established by the nature of things, by the objective laws of Nature. If it is to be realised in the positive order, the forces doing for it should be enhanced through the discovery of natural laws by the enlightened reason. Left to itself, the system will do for its realisation in the domain of the positive order. Exogenous factors can :

- either help its realisation, through the discovery, by the enlightened reason, of the laws of nature,
- or prevent it, through unenlightaned intervention of the State, or unenlightened behaviour of the proprietors class.

Hence, whereas the Tableau in disequilibrium representes positive order, the Tableau in equilibrium which represented the natural order, the one to find, was for Quesnay both the starting point and the objective.

It is a genetical model that attempts to present the whole productive process of social capital as a process of reproduction, with circulation merely as the form through which this reproduction takes palce; and the circulation of money only as a phase in the circulation of capital. It is also an attempt to show the origin of revenue in the process of reproduction, the exchange between capital and revenue, the relation between productive and final consumption; and to include in the circulation of capital the circulation between producers and consumers; and finally, to show the circulation between the two great divisions of "productive" labour — raw materials production and industry — as a phase in the process of reproduction.

- The scheme of Quesnay has its other aspect of originality, an aspect of utmost importance from the point of view of methdological studies, namely as a method. A method that simplifies the analytical pattern of general interdpendence and open up great possibilities for numerical theory and expression in mathematical language. In this respect, Quesnay's scheme represents the first, and great, step in the methodological development that leads to Leontief's input-output analysis, a development that enables us to use such a method as a tool of planning. In the chain of such development, the second link manifests itself in the reproduction scheme of Karl Marx.(*)

Phase 2 : From the middle of the 17th to the middle of the 19th century.

The Founders of Political Economy as a Science, The Classical School.

2 - The Founders :

* Adam Smith (1723 - 1790) - Philosopher - Professor at the University of Glascow - Britain.
Main publication : An Inquiry into the Nature and Causes of the Wealth of Nations, 1775.

(*) See M. H. Dowidar, *Les Schémas de reproduction et la methodologie de la planification socialiste, Editions Tires - Monde, Alger, 1964.*

* David Ricardo (1776 - 1822) - Business man - Member of Parliment . Britain.

Main publication : Principles of Political Economy and Taxation, 1817.

* Some add to the Classical School :

- R. Maltlus (1766 - 1834) - An Essay on Population - Principales of Political Economy. (Britain).
- J. B. Say (1767 - 1932), Traité d'Economie Politique (1803). (France).
- J. S. Mill (1806 - 1873) - Principles of Political Economy, 1848. (Britain)

* From the viewpoint of the birth of the new science, we think that the essential had been made on the hands of Smith and Ricardo.
* Crystallisation of the new science, its object, its method and its the theoretical content.

The Object :

Is related to the economic phenomena constituting the economic process : the economic phenomena of the production and distribution of the social product.

* it is in the domain of production that we should look for the wealth of nation, which we have to increase.
* production has its basis in the process of labour, with the division of labour within the entreprise - the labour force using the means of production - with wage labour appear capital to start the process of production in the form of money capital.

- each production for exchange is oriented towards the market. On the market prices appears, whose nature and determination should be studied. Hence, the problem of value, starting from which prices could be investigated.
- the social product is distributed among the social classes with their shares : rent, wages, interest and profit.
- the monetary phenomena represent another circle of the process of production.
- the role of the state in economic life with its financial activity is envisaged.

- trade with the external world and its effect on the national economic activity, especially on its development, is studied.
- finally the development of this new economy, the capitalist one, is a central preoccupation.
* the economic process, object of investigation, is constituted, then, by a number of intervening and interacting circles of activities : the cycles of production, distribution, exchange, monetary aspects, foreign trade, economic role of the state, reproduction and development over time.
* Influenced by the two ideas of the natural system and the material vision of the universe, the classicals consider the economic phenomena as object to objective, real, laws, eternal ones. They constitute an eternal economic system.
* Influenced by the individualist philosophy and its egoistic corollary, they relate the economic phenomena to the needs of a self - interest seeking Economic Man, who looks always, in each situation, for maximising his interest and miminimsing the cost : maximising the pleasure and minimising the pain. To do so, he must be aware of the conditions under which he is behaving. Doing so, he is a rational individual.
- These economic phenomena are conceived within the framework of a society :
* constituted of three social classes : the capitalist class, which owns the means of production other then land; the working class, offering their wage - labour on the market and the landlords, owning the land. For Ricardo, the relation between these classes are contradcitory.
* where production is carried out for exchange, for the market, with "a propensity of Man to troc", according to Smith.
* where the market is competitive, i.e., on which exist, for each single commodity, a big number of buyers and a big number of sellers.
* where the state does not intervene in the economic activity except within the role of the "Gendarme State", the state which cares mainly for the protection of private property, against agressions, internally (through the police function)

and externally (through the defence function). It carries out the economic activity whenever the private entrprise histates or refrains from doing the job.

For the method :

a) the objective of the research work is to discover the objective laws governing the economic phenomena.

b) influenced by the development winessed by the scientific method within the domain of natural sciences - their method of investigation is that of **abstraction,** with an **inductive - deductive method** of inference : with a difference between Smith and Ricardo :

* For Smith, it is the method of Isaac Newton : from the study of specific cases, reaches simple truthes through generalisation which leads to more complex ideas. And then, calls for the historical events to confornt with them the ideas he has reached, in order to deduce the evidence, direct and indirect.

* For Ricardo,

- the starting point is the theoretical construction of Smith : his theoretical ideas.
- he analyses these ideas, begining with assumptions that correspond to the economic circumstances of his time.
- to reach the conclusion whether Smith's idea is valid or not,
- if yes, he carries on the process of deducing additional ideas,
- if not, he gives the alternative idea.

c) In their economic analysis, the classical ignore the qualitative aspects of economic phenomena. They limit themselveselvs to the quantitative ones.

For **their theortical outcome**, they have the following theories :

* A theory of production based on a labour theory of value and a theory of capital.
* A theory of market price based on the labour theory of value, through the idea of "natural price".
* A theory of distribution of the social product among the social classes : rent for the landlords, wages for the working class and interest and profit for the capitalist class.

* A theory of money and a quantity theory of money concerning the general level of prices.
* A theory of foreign trade, not looked at in itself, but within the economic development preoccupation.
* A theory of public finance, i.e., concerning the financial activity of the State : how it secures the public revenues (through taxation and public borrowing) and effectuates the public expenditures (for the supply of social services).
* Finally, a theory of economic development of the new capitalist economy, not only in the long run, but also in a secular time dimension : the capitalist economic system arriving at a "stationary state".
* In this way, these theories represent the constitutants of the classical theoretical construction relative to the economic phenomena. These theories imply, in their view, the theoretical laws of the science of Political Economy. As the object of the science concerns, in their view, phenomena having an eternal nature, so would be the theoretical laws formulated with respect to such phenomena (i.e., they think that the formulated theories will be valid for all spaces and times, or at least for the coming time. In other words, they think that the laws of Political Economy are eternal ones.

By the middle of the 19th century, Political Economy emerges, then, as a new social science. Its theories and ideas commence to spread over the countires of Western Europe, and receive a certain general acceptance.

But with the continuous and more rapid development of the capitalist society and the crystallisation of its class structure (especially with its contradiction between the capitalist and the working class, between profits and wages), the unity of the theoretical construction of the classics will be questioned, announcing the development of Political Economy as a science, with the further development of the capitalist mode of production in its agressive expansion on an international level.

III-Phase 3 : The development of the science of Political Economy from the middle of the 19th century, and on:

- The industrial activity is becoming the dominant one with the concentration of industries and workers in the urban centers.
- The development of the capitalist and working calss and the relative decline of the landlords class. With the development of the cities and the Public Administration a middle class grows.
- The development of the agricultural activity with a fewer number of working people; the decline of the relative weight of the countryside. The city takes the lead.
- Imperialist expansion of Western capitalist countries and the constitution of big Empires, especially the British and the French ones : the development of the international economy with a capitalist international division of labour : underdevelopment is to be created for a big number of societies in Africa, Asia and Latin America.
- Within the Western societies, the development of the **Class Struggle** and the movement of political organisation of the different class : political parties and trade unions.
- The reflection of this struggle in the domain of social thought — **philosophy** : Idealism - Materialism : Mechanical & dialectical. - Social theory : - political theory - economic theory. - emergence of other social sciences, sociology, anthropology.- For the **development of Political Economy**, the starting point was the classical theoretical building, inherted especially from A. Smith and D. Ricardo.
- Out of it emerge two currents of economic thought :

The **first** studies thoroughly the Classics : the object, the method, the theories:

* carries out a critical analysis.
* keeps what is considered as valid.
* gives alternative ideas.

|------> the science receives a certain development. This is the current of **K. Marx and the Marxists ...**

- The **second** current :

* starts from some ideas of the classics, especially ideas relative to the market, the market forces and prices fluctuations on the market.
* gives a different vision on * the object * the method * and a different theoretical building.
* during the last third of the 19th century, by economists principally professors of political economy in West European universities (Britain, France and Austria):
* the current of the New Classical School, called the Marginalist School.

1 - Marx, K., : 1818 - 1883 - German, Philosophy of Law - Philosophy - Economist - Sociologist - Man of Social practice as a militant in the international working class movement.

* Many writings, most important in Political Economy : A Critique of Political Economy. Foundations of the Critique of Political Economy - 2 Volumes - Das Capital, A Critical Analysis of capitalist production, 3 vol. - Theories of Surplus Value, 3 vols.

- Marx and the development of the science of Political Economy : the object, the method, the theoretical construction:
- Starts from the writ.ings and theories of the cl.assics, studies them **critically,** with a **different methodology** from the philosophical viewpoint (his is a dialectal materialism), on the basis of a huge knowledge of social events of **his** time and of the **European** social history:
- The **object of political economy** : for its delimitation, he accepts the idea of a process of economic activity with its intervening and interacting circles as defined by the Classics.
- But, while for the Classics this process oscillates **around** the process of social labour (wage labour using capital (fixed and material current inputs) with its division, for Marx the process is **based on social labour** and oscillates **around the cycle of capital,** which, as a material crystallisation of a social relation between the capitalist and the working classes:

* dominates socially the **means of production,**

* dominates the **decision** making concerns investment and production,
* gives these dicisions an immediate objective other than the immediate satisfaction of the needs of the members of the society : monetary profit. This last objective is pushed towards the final end of the economic process and becomes a function of the realisation of profit.
* the cycle of capital is hence the intermediary of the cycle of **social** production.
* so, while in the previous forms of society the social preorcupation was oriented towards production and the immediate satisfaction of needs of the working people (and other owning classes), in the capitalist society, this procupation is oriented towards the cycle of capital and the realisation of profit for one social class, the capitalist class. The satisfaction of needs of the other social classes depends on what happens to profit.

- The economic process contains the **economic phenomena,** which, for the Classics.
- have an independent matrial existence,
- governed by objective laws,
- defined starting from the needs of the self interest seeking individual having the characteristics of the "economic man",
- have an eternal existence, at least from the capitalist society and on.

For Marx, these pheomena :

- have an independent material existence,
- are governed by objective laws,
- but, defined from the viewpoint of the **effective** economic relations between the social forces existing in **each** society. These relations make out of the individual a **social** being, having many dimensions and various objectives, some economic and others non-economic, with a social behaviour guided by various criteria and not by the simple maximisation of results.
- these phenomena are, as social relations, **changeable :** each historical society has his economic process. And over history, one can distinguish for each social formation two categories of

economic phenomena : one vital for the congnition of the nature and movement of this society, these are the economic phenomena **specific** to such society (like, e.g., slave labour for some societies, serf labour for other societies, and wage labour for the capitalist society); and another category of economic phenomena **common** to more than one social formation (e.g., the circulation of money since some societies of the Antiquity uptil now, with even **different modes** of monetary circulation).

- in a word, for Marx, economic phenomena are vived social relations, continously changeable, dynamic and governed by objecive laws having a historical nature. They are to be studied in each society and for the different historical stages of the same society, in order to know :
* how they are organised in a social totality,
* the laws governing them,
* the principal law of organisation for each mode of economic organisation.
- For the **capitalist economy :**
- it is the economy of a society which represents one historical stage in the history of human society.
- As it replaced a previous social organisation, it is subject to the same law of social change: the necessity of being transformed into another social formation.
- for the economic process, it is studied, starting from the theoretical achievements of the Classical School, within a different analytical framework.
- The **analytical framework :**
- starting from the dominating relation of production, based on the private ownership of the means of production (especially the industrial means of production), **the immediate objective** of the economic activity becomes the **monetary gains,** translated in the domain of investment and production by monetary profit (which might contradict with the staisfaction of needs). And, the **mode of action** of the economic process is an individual mode, effectuated through thousands and millions of indi-

vidual independent and separated decisions, whose result, on the social level, will be effectuated by what these individual actions would materialise as forces on the market to act, in their turn, according to the law of value and prices.

- the society is constituted of social classes with contradoctory relations : the principal contradiction is that Capital / Wage Labour, (economically translated into the contradiction between wages and profits), and that between the capitalist and the working classes, socially. Within capital, the struggle exists between its constituants : agricultural capital, industrial capital, commercial capital and financial capital; and with each of these consitituants between its parts, a competitive struggle at a first stage and a monopolostic struggle at a second stage. As for the classes of that society, we have:

* two classes rising with the new society:
- a capitalist class which owns the means of production and dominates its decisions,
- a working class, divorced from the means of production, with its **labour-power** becoming a commodity to be sold on the labour market. The general form of labour is, with time, the wage labour.

* a third class which is vanishing, historically, with the development of the capitalist economy, the class of landed aristoracy. Their interest is in contradiction with the interests of both the capitalist class and the working class. They recieve the rent of land as a revenue, being a part of the surplus created by labour, and appropriated by the owners of the means of production.
* a fourth class which will **eventually** disintegrate, despite the vital role its played in the transition for capitalism and in the development of the capitalist entreprise, that is the middle class.

- the economic activity takes place through a continual struggle between social classes, a struggle which give the market a competitive form tending towards a more and more monopolistic form with the amalgm of the different forms of capital.
- starting from a socio-political theory of the State (is nature, its historical emergence, its rôle and its fate), the role of the State

is envisaged in its continous preoccupation to guarantie an equlibrium which prevents social changes against the interest of capital.

- Within this analytical framework, are studied the economic phenomena constituting the economic process as a historical process : historical in the sense that it is historically given to the research worker; in the sense that it is not eternal. It is the economic phenomena as there are lived as social relations in social praxis, with their existence independently from the volition of man, in their perpetual transformation, a transformation occuring from within, from the dialectal existence of the matter : in each phenomena there the thing and its negation (the negatif), the struggle between them produces the new element but maintaining an element of the old, and, hence, continuity is assured through the discontinuity. Transformation occurs through the quantitative change which gives, after a certain level, a new quality representing the new.
- With this dialectical **vision** of the economic phenomena, the search for the formulation of the economic knowledge presupposes that these phenomena are governed by objective laws and the objective of such research is to discover theses law. The **method of research** aims at the discovery of the dialectic law, through obervation and experment, through investigation and abstraction, utilising for inference an inductive - deductive method, through the verification of ideas formulated, with a special interest in the method of presentation.
  - the formulated knowledge is relative, related to historical phenomena, phenomena which do not stop changing. Research gives us an accumulated knowledge which is always changing. The laws of Political Economy are mainly **specific laws** (which does not exclude the existence of common laws whose importance differs from one historical situation to the other).
- His **economic theoretical set - up** cannot be separated from his over-all social theoretical construction. But still, we can

distinguish a theory of production based on the process of social labour and taking place through the cycle of social capital : the whole process is organised, through exchange, by the law of value and surplus - value starting from the theory of value, a theory of money is elaborated, and a theory of price (through the concepts of cost - price and production price - intimitly related is the theory of distribution, reproduction and development.

- Marx's Labour theory of value and the rest of his threortical construction imply **specific significance of the individuals of his termenological language:** specific meansing of use-value, value, exchagne value, surplus-value; labour force, labour power, labour; individual (concert) labour and social (abstract) labour; simple labour and complex labour; organic composition of capital, rate of profit and rent of land ... etc.
- From the theory of capitalist development, with the capitalist mode of production tending to dominate the world economy, Marx pronounces what he considers as the **main laws of capitalist development over time** :

* the law of the cumulative concentration (in the hands of the capitalist class at the expense of other social classes) and centralisation (within the capitalist class in the hands of a fewer number of individuals of this class, that is accentuated monopolisation of the means of production) of capital.
* the law of the increasing misery of the working population. Elaborated, at a first stage, on the assuption of the non-intervention (by the working people or any other force) in the operation of this law. By "increasing" misery is meant, **absolutely,** the widenning gap, over time, between the conditions of living of the capitalist and the working classes; and, **relatively** that the standard of living of the working people does not increase at the same rate of that of the increase of the productivity of labour: the latter is higher than the former.
* the law of the contineous replacement of labour by the instruments of labour (the machine), the increasing organic composition of capital and the **tendancy** of the rate of profit to decline in the very long run. A tendancy which depends on the state of relations

between labour and capital, the possibility of expanding abroad (through foreign investment), the pattern of technological innovations (from manual to mechanic, and from mechanic to antomatic, ...) and the type of internal organisation of the entreprise.

* the law of the uneven development of capitalism :
- over time, for it develops through crises (cyclical fluctuations or business cycles), and
- over space, within uneven development between the sectors of the economy, between the regions within the same economy and between the economies of the different countries, within the international economy.

Being basic to both the birth and development of Political Economy, **the labour theory of value,** as has been formulated **between the Classics and K. Marx,** has been subject to tremendous theoretical effor and object to continous discusscion and controversy; a fact that imposes the necessity of presenting its essence. To do so, many methods of presentation are possible. But, having to do here with lectures on political economy we have opted for a **pedagogical method of presentation:**

- to elucidate, first, the questions whose pronomenciation, in a specific intended order, enables us to put correctly the problem of value,
- to give, secondly, the answers advanced by the Classics and Marx to these questions;
- to have, finally, the theory built up by the answers of these successive questions.

Let us try, first, to precise the significance of the relevant terms. By **use-value** is meant the qualitative capacity of the product to satisfy a specific human need, it is synonymous to utility. By **value** is meant a **social** characterstic which makes the product capable of being exchangeable with other products and determine the degree of such capability. In other words, commodities become characterised by a common characterestic which makes them exchangeable despite differences in their use-values. In exchange relations (which are, like other economic relations, social relations taking place therough the intermediary of

material things), the value of a commodity expresses itself in the **form of exchange-value,** which is a relation (a ratio) between two values. Accordingly, it is necessary to make the distinction between value and the form it takes in exchange, which is its value-in-exchange. If the exchange value of a commodity is expressed in terms of the units of the commodity which plays the role of money we are in presence of the **price** of such commodity:

1 - To what sort of economy the phenomenon of value belongs? To the exchange economy based on the division of labour and the private ownership of commodities. Within this economy, value arises only with respect to what is **socially produced and socially reporducable.** For, an **objective law** finds its raison d'être in the fact that it is governing the phenomenon in its developmental repetition over time, and not as an accidental or exceptional event.

2 - What is the role of the use-value with respect to value? The use-value is the **condition** of value : for the commodity to have value (when exchanged) it must be useful to the others, it must have a **social** use-value, a social utility.

3 - What is the **source** of value ? This question is relative to the qualitative aspect of value (its answer presupposes the distinction between labour power (the capacity of furnishing a conscious effort) and labour (the effective use of one's labour power, by utilisingly the means of production, in such process labour is carried out), between individual (concret) labour and social (abstract) labour. the former is a specific individual labour in a specific process of production (say the production of a pencil), the latter is labour in general, as a conscious effort of man in general. The answer of this question is that **social labour** is the source of value. What all commodities have in common is that they are all the product of human labour in general, in abstraction.

4 - What is the **measure** of value ? This question is relative to the quantitative aspect of value. For the Classics, the answer differs from Smith to Ricardo : for Smith, the value of the commodity is measured by the quantity of labour which the com-

modity **commands** when it is **exchanged** with other commodities, that is by the quantity of labour emboided in the commodity obtained in exchange for our commodity. Smith looks for the measure of the value in the conditions of **the exchange of the commodity and not in the conditions of its production.** On the basis of this critique, Ricardo states that the value of the commodity is measured by the labour time **effectively spent, directly and indirectly, in its production :** that is, spent not only in the last stage of its production but also for the production of what is needed for the production of our commodity. But, what would be the measure if the same commodity is produced by different labour times in different units of production ? For Marx, the value of the commodity is measured by the labour-time (having a certain intensity of effort) **socially necessary for the production of the commodity.** What is socially necessary is determined according the technique of production dominating in the branch producing the commodity. If the commodity is produced by a number of entreprises using different technical devises, the hand loom and the more advanced mechanical loom, a unit of the commodity will be produced in more labour time with the first devise thant with the second one. Which labour time will count for the measure of the value of the commodity ? The labour time determined by the use of the dominating technical devse. If it is the second one, the value of the commodity will be measured, for all the units of the commodity, by the labour time necessary according to this devise. It willl be considered as socially necessary. For, it is the one which dominates in the branch producing the commodity.

5 - What is the **regulator** of value ? This question is usually either ignored in the current writings on value and prices or confused with the measure of value while by the first question we look for the **unit** by which we measure value quantitavely, by the second we try to find out what determines the amount of value (that is, the number of units) a commodity would have. For Smith, the **regulator of the value of the commodity** differs between the ancient society (meaning the precapitalist simple commodity economy) and the modern society (that is the capitalist

society). For the former, where the product of labour was totally attributed to the labourer, it is the amount of labour spent on the production of the commodity which regulates the amount of labour it commands while it is exchanged. But, in the modern society, from the time when the means of production, other then land, become object of property to the owner of the entreprise, a part of the product of the labourer is assigned to this owner, the profit. In the same way, from the time when land becomes object of proeprty to a land owner, another part of the product of the labourer is assigned to this owner, the rent. Here, the amount of labour spent on the production of the commodity stops to be the only regulator of its value, to it profit and rent are added. For Ricardo, the problem is already solved when stating that the measure of value is the labour time effectively spent in the production of the commodity. This indicates that the **unit of measure** of value is the unit of labour time and that it is the **amount** of labour time effectively spent in the production of the commodity which **regulates** its value. So was the case with Marx, with the difference already mentioned, that he talks about the labour time **socially necessary** for the production of the commodity and not the labour time **effectively spent.**

6 - What is the relation between value and the **productivity of labour?** This question evoques the conditions of labour within the economic process : natural, social (organisa- tional included), material and technological conditions. A very breif answer in this context : the relation between the value of the commodity and the productivity of labour (that is the amount of product produced by the labourer per a unit of labour time) will be inversely proportional : the higher the productivity of labour, the less the labour time socially necessary for its production, the less will be the value of the commodity.

7 - How the value of the **labour-power** (and not labour), **as a commodity,** is determined ? With the capitalist society, what becomes a commodity having a specific market called " labour market" is the labour - power, that the **capacity,** physical and intellectual, of the wage-earner to effectuate a conscious effort

if he is offered an opportunity to work. When such opportunity is secured implying the availability of the other condititions of production, the means of production, which he no longer owns them), the utilisation of the labour-power generates labour : the effective expenditure of sweat, blood and nerves. The answer to this question is that the value of this commodity is determined according to the same principl concerning the source, the measure and the regulator of the value of commodities in general. But, for the labour-power as a commodity, there is something very specific. Being intimitly related to the essence of man, as a social being who realises himself through social labour, it is a living "commodity". Its value must imply, hence, a social condition: that it enables him to survive and reproduce the labour force under the specific historical social circumstances. So, the value of the labour-power is determined by the amount of labour time socially necessary for the production of the means of subsistence necessary (historically) for the life of its owner and his family, the latter being the reproducer of the labour force.

With the Classics, the absence of the distinction between labour-power and labour leads them to a sort of circular causation with respect to the answer of this question : the value of commodities is determined by the amount of labour spent in their production. And the value of "labour"? Is determined by the amount of labour spent in the production of the "means of subsistence" for the labourer and his family. Marx introduces the distinction between labour-power and labour. The value of commodities is determined by the amount of labour time socially necessary for their production. But the value of labour-power (as a commodity) is determined by the amount of labour socially necessary for the production of consumption goods necessary for the living of the labourer and his family in the given historical conditions of the working class.

8 - How can we arrive, starting from the value of the commodity and the value of labour-power, at the **surplus** ? With the ideas this question evoques : the ideas of labour and surplus - labour, of product and surplus-product, of value and surplus-value (with what the latest implies about rent, interest and profit : the three constitu-

tans of the surplus-value. The value of the labour-power deduced from the value of the commodities gives us the surplus-value, the part of value appropriated through the ownership of the means of production : the land and the means of production, object of the social relation, capital. The surplus-value is resolved into rent, interest and profit.

9 - The question relative to the constituants of the surplus-value and how it is resolved into rent, interest and profit? The answer to this question is given by the **theory of the distribution of social product,** as based on the labour theory of value. This theory of distribution shows how are determined the incomes of the different social classes which permit them to act as buyers on the markets of consumption and production goods.

10- What is the relation between the value of the commodity and its value in exchange which imposes itself at the time of its exchange on the market? And, how the passage from value to exchange value (the form the value takes in the effective exchange of the commodity on the market), how this passage is effectuated ?

11- How can we arrive theoretically from the **concept** of value at the **concept of money?**(*), and from the value, **through money, to price ?** With respect to price, the concept of **natural price** of the Classics and that of **production-price** of Marx, in their relation to the current price of the commodity, its **market price**? The passage of the value of the commodity is effectated, after having arrived to money, through the abstract concept from **"natural price" of the Classics** : a sort of price, based on the conditions of production, with which the commodity leaves the domain of production to-

(*) See, in this respect, Mohamed Dowidar, Principles of Political Economy, Volume 2, Monetary Economy, El Halabi Publications, Beriut, 2001. This passage implies the elaboration, starting from value, of a **theory of money** in terms of whose units the exchange value of the commodity is expressed under the form of a **price.**

wards the market, respresnting the **long-run average** around which oscillates the market price in the short run under the effects of the forces of supply and demand. For Marx, the passage from value to the market price is effectuated through the **abstract concept of "production-price"** : the cost-price of the commodity to its capitalist plus the average rate of profit in its branch of production, this **production price being the long-run axe around which oscillates the market price** under the influence of the market forces, that is the forces of demand and supply.

12- This implies the question of how to introduce the **movements** of the market forces (the forces of demand and supply) to determine **the fluctuations** of the market price, and, hence, the determination of this price at a **moment** of time. This momental price would either coincide with the natural price (or the production price), when the two opposing forces, the supply and demand, are equal, or shift towards a ligher level when demand comes **bigger** than supply, or towards a lower level when supply **exceeds** demand. In the last two cases, it is the **inequality** between supply and demand whichdetermines the momental market price, and not the "equality" as it is "stated" by the neoclassical theory of market price. In this way, no violation is committed against the scientific law according to which when two opposing forces meet together, at the point of their equality they neutralise each other and the function will be equal to zero. They can determine nothing.

This would be carried out with the competitive struggle between entreprises (called competition and monopolistic competiton) and the monopolostic struggle btween them (called monopolistic and obligopolistic practices), especially when the monopolistic organisational form dominates the majority of the branches of the economic activity since the last quarter of the 19th century.

* * *

The development of Political Economy as a science is realised with the development of the capitalist form of organisation

as a society; with the development of its social forces, and for the working class, the development of its socio-political movement enhanced by its social organisations (trade unions and political parties). In such development the labour theory of value (with its significance for the creation and distribution of the social product) starts to have, in the daily social praxis, socio-political implications, serious ones from the viewpoint of the fate of capitalism. To counteract this, "the direction of the economic car has to be changed to bring it back from production to circulation (exchange) to reach an alternative to Ricardo's theory, an alternative which shows that wages (i.e., labour) are the effect of the value of the product and not its causes. This means, in the words of S. Jevons, that Political Economy as a science has to be reoriented. S. Jevons will be one of the builders of the new stream of economic thought to be elaborated within the "academic circles" of the European socities. We mean, here, the Neo-classical stream of economic thought.

2- The Neo-classical School (The Marginalist School)

- The building up of such stream of economic thought starts from some ideas of the mecantilists and the classics, especially in relation to the market, the market forces and price fluctuations on the market.
- The neo classic economic thought starts to take momentium in the last third of the 19th century, to be crystallised uptil the First World War, and to witness some developments in its theories after that.
- It occurs against the background of socio-economic transformations in West - European countries. Let us remention the most important:

* the struggle between the capitalist class and the landed aristocracy faints in the interest of the first class.
* the industrial development implies the development of the working class, quantitatively and qualitatively (in consciousness and organisations).
* the contradition between the working class and the capitalist

class imposes itself in social praxis, and shows itself already around the distribution of social product, especially between wages and profits.

- The dominating economic theory, especially the labour Theory of value (between the Classics and Marx), which appeared in the domain of research for the theories of the new science, backs, objectively, the working class in its struggle. It was adopted as a theoretical guide by many of the West European trade unions and working class political parties.

- The struggle provokes on the other side the necessity of **the arrival at another economic theory** which points at another source of the value of commodities : as it has been clearly and frankly announced by one of the founders of the Neo-classical school in London, S. Jevons, as we have mentioned before.

- The elaborations of the new economic thought has taken place thanks to the intellectual efforts of the academic economists, manifested, simultanously, in three European Universities : London, Lausanne (France) and Vienna, by two successive generations:

* Britain : S. Jevons (1835 - 1882) (London)
  A. Marshall (1842 - 1924), Cambridge
* France : S. Walras (1934 - 1910) (Lausanne)
  V. Pareto (1848 - 1923) (Lausanne)
* Austria : K. Menger (1840 - 1910) (Vienna)
  V. Böhm - Bawerk (1851 - 1904), and
  F. Von Weieser (1951 - 1926).

- Their vision concerning the "science" which, starting from the title of A. Marshall's book, Principles of Economics, starts to have the name "Economics", especially in the anglo-saxon countries, covers object and the method.

- As for the **object,** the center of preoccupation is shifted to the domain of exchange, not the exchange leaning on production, as it was in the Mercantile thought, but exchange viewed from the angle of the consumer's utility. On the market, appear the individuals of the type of the "economic man". Economic phenomena are behaviouristic phenomena, for the individuals in

their relations with commodities (with things) :

- starting from the utility, to maximise, as consumers,
- and starting from monetary profit to maximise, as entrepreneurs (producers!).

The economic phenomenon finds its essence in the relation between this type of individual and commodity. The essential is the quantitative aspect of this rleation (i.e., the qualitiative aspect is ignored):

* To know about the economic phenomena, we study the behavour of these individuals in their relation with commodities:

- the behaviour of the consumers, on the side of the **demand** for the commodity (starting from a need armed by a purchasing power, a sum of money), and
- the behaviour of the entrepreneurs, on the side of the **supply** of the commodity
- out of this knowledge we know **the forces of the market**, whose interaction determines prices and the quantities of commodities bought and sold on the market, at a certain point of time with changes over time due to changes into the market forces.
- the result would be a **theory of market price,** representing the center of the whole theoretical preoccupoation.

* Starting from this vision, **production** is conceived :

- as reduced to a sort of **exchange** (as a relation between the individuals and commodities;
- The owners of the "factors of. production", land, labour, , capital and entepreneurship, sell their commodities to a buyer, the entrepeneur, for monetary gains.
- The owners of the entreprises buy these factors for their utility while used in a technical process of production. Theses factors are productive to them.
- On the markets of the "factors of production" their prices are determined by the forces of demand and supply.
- Strarting from the prices of these "factors" and the quanti-

ty of demand for each its share of income is determined.

- There exist, hence, four independent "factors" of production. Despite theis independency they gather in a proress of transformation. So, they coperate togother (no contradiction) Each of them is a **direct** source of one sort of money income: rent, wages, interest and profit (a theory of distribution of income).

* In both cases, the relation is conceived as a subjective relation; one from the concumer's point of view in his search for some utility maximisation ; and the other from the capitalists' viewpoint, since his main preoccpation is with exchange on the market of productive forces to use them "technically" in the creation of commodities, and back to the market as a seller of these commodites.

- As for **the method**: only the quantitative aspects of the economic phenomena are considered. If such phenomena are defined starting from the needs of a certain"economic man" with typical characteristics, no qualitative differences exist in the economic behaviour of the individuals being under the same circumstances, neither in one society, nor in different societies.

* Futher more, the emphasis is put, from the viewpoint of **the method of analysis** on the behaviour of the economic unit, the micro-economic unit, a consumer or a "producer", with the national economy, the macro-economic unit, conceived as a simple arithmatic addition of the composing micro-economic units.

* In the study of such units, usually a **partial** conception of the phenomenon is adopted. That is a conception according to which not all the conditions (the factors) participating in the realisation of a certain result are taken into consideration at the same time, since they produce their effects, in real life simultanecously. What is more usual is to take the factors one after the

other to findout its possible effect, supposing that the other factors remain Constant: it is the famous "ceter is paribus "assumption".

* As for the verification of the formulated ideas, the dominant attitude is that "theoretical" study shows "the optinal position" which produces the maximum of results. The more real behaviour approaches this "position" the better. The more it moves away of it the lesser will be the results achieved. This means that research does not aim at the explanation of social reality, but at the elaboration of an "optimal model" for the functinong of such reality. Then, one has to attempt, in his real activity, to get as near as possible from this "model".

- With respect to the neo-classical **theoretical construction,** the Neo-classics have a **theory of market price** for both consumption goods and "factors" of production. It is the central bone of their "economic theory". They have a theory of income distribution based on the idea of the **marginal productivity** of the different factors of production. They have a theory of money, a theory of international exchange and a theory of public finance. Finally, their theoretical construction does not include a theory of value or a theory of economic fluctuations, nor a theory of economic development.

- As the theory of market price repesents the center of the Neo-classical theoretical preoccuation, it would be useful, to complete the Neo-classical image of "economics", to give an overall view of this theory, with the objective, not to give a full account of it, but to show **the methodology of building up** such theory. It is why we have opted for a rather **pedagogical method of presentation.**

The neo-classical theory of market price, an overall view:

It is said that the market price of a certain commodity (produced by a certain industry) is affected by the demand of the consumers of this commodity and the supply of its producers (enterpreneurs). Accordingly, if we want to build up a formal theory of market price, we have :

- To reach, first, a determination of the demand of the censumers, the market demand,

- To reach, second, a determination of the supply of it offered by its entrepreneurs, the market supply,

- To amalgam, third, the two theories of demand and supply in at theory of the determination of the market price,,

-To see finally a concept which plays and important role in the analysis of price formation (and other sorts of analysis), that is the concept of elasticity, the demand elasticity and the supply elasticity.

Before presenting the steps of building up the theory, two methodological remarks impose themselves:

-The first remark concerns the precision of our termenological language, for, when we talk about demand and supply we talk about **flows** of quantities. We are not interested in one single purchasing (or selling) operation but with a continous flow of buying (or selling) operations during a certain period. Accordingly, we have expressed demand (and supply) in terms in one or other quantity related to a certain time peroid, be it, for exemple, a kilo of sugar per day or seven kilos per week. It is a matter always of a quantity or quantities demand or supplied through a period of time. This is to be always remembered even if the time peroid is not mentioned.

- The second remark shows the method adopted:

* To determine the price of the commodity on the market we must have the total demand for the commodity on the market, that is the demand of all of those who consume the commodity. It is the same with the total supply of the commodity on the market, the supply of all of those who produce it.

* To reach the total demand (the market demand) we try to determine first the demand of the individual consumer, to shift, at a second stage from the demand of the individuals to the demand of the market. The same method is adopted for the determination of the market supply of our commodity.

* This method can be expessed in the following scheme:

1- The Demand

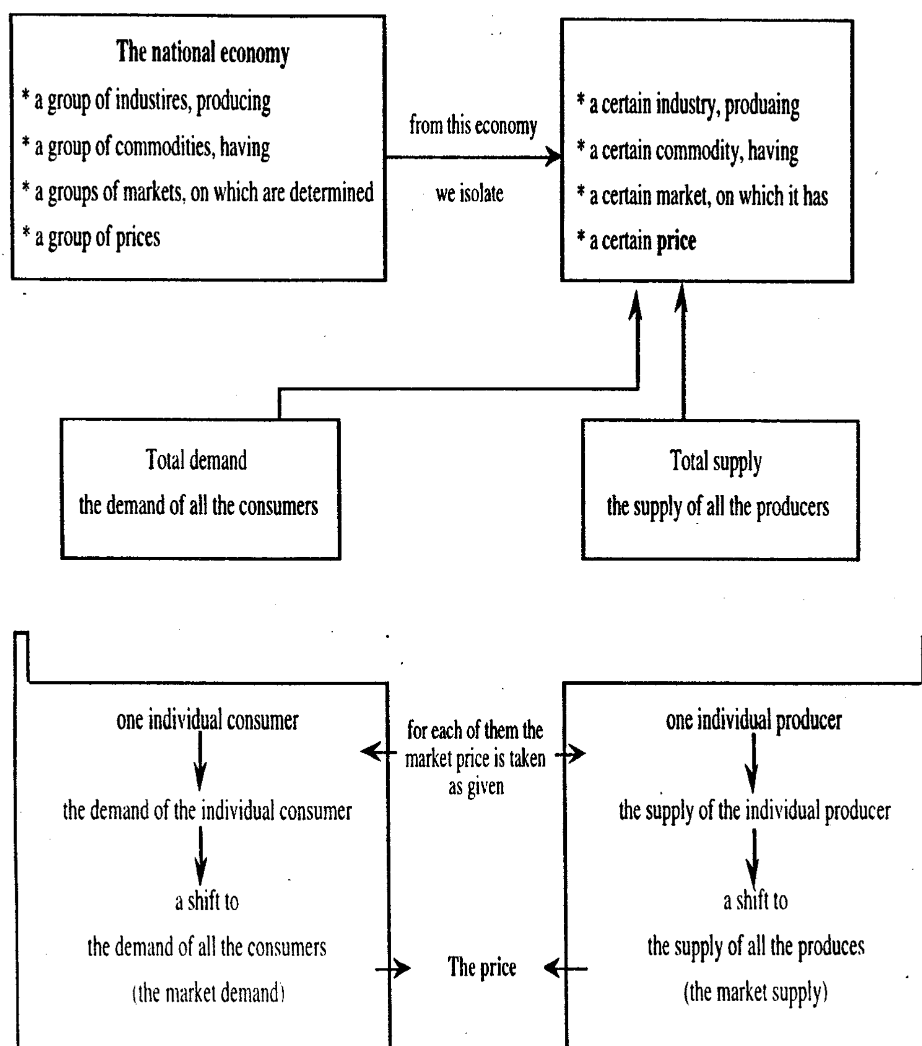
The objective is to reach how the market demand for the commodity is determined. This demand is considered by the Neo-classics as the total of the demand of individuals who buy the commodity. To realise our objective, we define first the individual demand and the market demand, to see, second, how the individual demand is determined, to shift, third, to the market demand:

The definition of the demand: By the individual demand it is meant: The different quantities of the commodity which the individual consumer is ready to buy at the different prices during a certain period of time.

In the same manner, the **market demand** is defined as the different amounts of the commodity which the individual con-

---

* *Here, we will limit ourselves to the first three steps, leaving the concept of elasticity for a futher full account of the neo-classical theory of market price.*



This scheme implies the donination of full competition in the commodity's market

sumers are ready to buy at the different prices during a certain period of time.

It is not a matter of one sinde quantity demanded at a certain price, it is a **relation** between a series of quantities and a series of prices during a period of time, that is a matter of **flow** concerning the quantites which the consumer or the consumers are **ready to buy**. So, we are dealing with the expression of concevied **possiblites** at the different prices. **The determination of the indivdual demand**: this demand is influenced by a certain nember of factors, each of which is affecting the demand in a certain manner and in a certain direction. Let us explicite that

The most important factors affecting the individual demand for a commodity are:

1- The price of the commodity: as we are dealing with a single individual consumer, the quantity he buys is too small to affect the price of the commodity, so, such price is determined for him. He takes it a given. In most cases we expect the consumer to decrease the quautity demanded when the price of the commodity rises. And viceversa, i.e., increases the quantity demanded when its price falls.

2- The consumer's income: in most cases, an increase in the money income of the consumer tends to increase the quautity demanded of the commodity, and vice versa.

3- The prices of other commodities; to satisfy his different needs the consumer buys other commodities besides the commodity we are considering. His money income is divided between the commodities he buys. On this basis, a change in the prices of the other commodities might affect the quantity demanded from the commodity we consider (assuming that the price of our commodity does not change). To know the ef-

fect of a change in the prices of the other commodities on the quantity demanded from our commodity, a distinction should be made between three categories of commodities:

a- the other commodity might be complementary with the commodity in our consideration, and by complementary it is meant that its completes our commodity in use, i.e., they are used together to satisfy a certain need : example, our commodity is tea, the other is sugar - examples for other complementary commodities : pencil and paper, car and fuel ... etc. In this case, a rise in the price of the complementary commodity (the sugar) leads to a decrease in the quantity demanded of our commodity (the tea), and vice versa.

b- the other commodity might be a substitute to our commodity, that is it replaces it in use, in the satisfaction of the need : the other commodity is coffee when our commodity is tea - examples for other substitute commodities : butter and oil, electricity and natural gaz, public transport and private transport, cinema and theatre ... etc. With a rise in the price of the substitute commodity (the coffee), the demand for our commodity (the tea) is expected to rise, and vice versa.

c- the other commodity might have no direct relation with our commodity in its use. In this case, a change in the price of the former would have no effect on the quantity demanded of the latter (ex. pencil and vegitables).

4 - The consumer's taste and habits, it is meant here his taste for the commodity and his habits of consumption which affect his preference for one or other commodity. If the consumer is affected by the "mode", he would change the quantity demanded from our commodity (usually at the expense of other commodities) even if his income and the market price remain unchanged.

It is possible to express all that by saying that the consumer's demand for the commodity is determined by (i.e., is function of):

- its price.
- the prices of other commodities bought by the consumer,
- the consumer's income, and
- his taste and consumption habits.

This could be expressed by the functional relation :

$D_a = f(P_a, P_{n-1}, I, T)$ where,

D_a is the demand for commodity a; P_a is its price; P_{n-1} are the prices of other commodities, I is the consumer's income and T is the consumer's taste and preference. This relation is called the **individual consumption function.** It is a complex relation which shows that the demand of the individual consumer is determined by all these factors **collectively**, i.e., that they unit all to determine such demand. Accordingly, a change in the demand depends on a change on all or some of these factors. If we want, thus, a precise determination of the demand it is necessary to study the effect of all these factors at the same time, which is almost impossible. To overcome such difficulty a recourse is made to a methododological fiction according to which is studied the relation between the demand and **each** of these factors taken in isolation, with the assumption that the other factors remain as they are, i.e., unchanged for the time being : the famous "ceteris paribus" assumption : meaning that "other things being equal." This method is the **partial analysis method.**

Consequently, we can see, with some details, the relation between the individual demand and each of these factors one after the other, in order to know the effect of the exchange of each of them on demand:

1 - The relation between the demand for the commodity and its price : $D_a = f(P_a)$: Other things being equal, and with respect to **almost** all the commodites, the quantity demanded by the consumer increases when its price falls. Since with the fall in price, the commodity becomes cheaper relative to the commodities which can replace it in utlisation, the consumer tends then, generally, to buy a bigger quantity of this commodity. The buyer does not always buy the same assortment of commodities, but replaces one for the other with the changes in their prices. For example, if the price of a certain sort of vegetables declines, the consumer buys more of this sort and reduces the quantities of the other sorts of vegetables which became **relatively** more expensive. And, the contrary when the price of the commodity rises, he tends to reduce the quantity demanded.

This relation between the quantities which the consumer is ready to buy at different prices, can be expressed in terms of numbers (two sets of **hypothetical** numbers) in the form of a schedule, called the **individual demand schedule**, as follows:

Schedule 1 : the individual demand

Price, pa in terms of money units (pounds)	**Quantity, q** in terms in physical units per time period
22	20
20	21
16	24
12	30
8	40

This schedule can be expressed, graphically, (see diagram 1), by measuring the price (Pa) on the X axis, and the quantity on the Yaxis. Then we take the consumer's demand schedule to represent each price with its corresponding quantity by a point on the diagram. Then, we join the different points together, giving a curve which expresses the relation between the quantity that the consumer is ready to demand with the change in price. This curve is called the **individual demand curve.** Usually the curve is traced in the form of a straight line (see diagram 2). **The curve is obtained on the assumption that the consumer's income, his taste and habits and the prices of other commodities remain constant.**

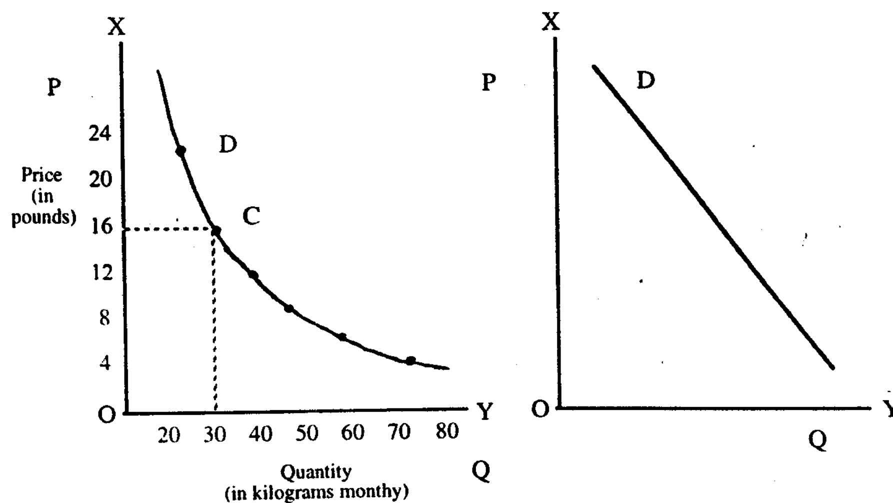


Diagram 1 : the individual demand curve **Diagram 2 : the individual demand curve**

* this curve slopes downwards to the right
* it shows that demand is a decrasing function of price
* for simplicity, it is usually given the form of a straight line.

Each point on the curve represents a certain price with a corresponding quantity. Point C, for example, indicates that the consumer is ready to buy 30 units of the commodity when its price is 16 pounds, and so on.

The whole of the demand curve reflects the complete functional relation between the quantity and the price (price being the indpendent variable and quantity the dpendent one). When we talk about the demand for a certain commodity, we mean the whole of the curve (i.e., all the functional relation) and not only a certain point on this curve. In other words, by demand is meant all the quantities which the consumer is ready to buy at the different prices. This relation is called the law of demand(*).

2 - The relation between the demand for the commodity and the prices of other commodities : $D_a = f(P_1 \ldots, p_{n-1})$: Other things (among which the price of the commodity itself) being equal, what is wanted is to know the effect on the demand for the commodity resulting from a change in the price of another commodity, the other commodity being b or c. Here, we have three possible relations between the demand for a commodity and the prices of other commodities. A fall in the price of the commodity b, for instance, may lead to :

a - either a decrease in the quantity of the commodity a demanded by the consumer. This is what happens in the case of substitute (or competitive) commodities. A fall in the price of b (the coffee) decreases the quantity that the consumer de-

(*) To this general rule concerning the relation between the demand and the price exists a rare exception related to what is called Giffen's goods (he is an English economist of the 19th century) whose quantities increase with a rise in price. Giffen has noticed that with the rise of potatos during the famine which invaded Ireland in 1845, the quantities consumed of it had increased. Effectively, this is due to the fact that with rise of prices of food goods the prices of goods other than ptatos (like meat) rise to a point which renders its consumption impossible for the low income consumers; these goods are replaced by potatos, so, the demand for it increases.

mands from the commodity a (the tea), on the assumption that the price of the latter remains unchanged. This is because the commodity b can replace the commodity a in its use. the consumer will tend to replace b for a , and his demand for the latter declines (see diagram 3). Of course, a rise in the price of b leads to an increase in the quantity of a.

b - or an increase in the quantity of the commodity a demanded by the consumer. This is what happens in the case of complementary commodities. A fall in the price of b (be it tea) leads to an increase in the quantity demanded of a (be it sugar), supposing that the price of sugar remains without change. This is because the commodity b completes the commodity a in its use and a fall in its price encourages the consumer to augment his consumption of the commodity a - (see diagram 4). Of course, a rise in the price of the commodity b leads to a decrease in the quantity of a :

c - or still, to leave the quantity of a commodity (which the consumer buy) as it is. This is what happens in the case where the commodity whose price has changed is not related to the commodity a in its use, as when the price of textiles changes, with tea being the commodity a.

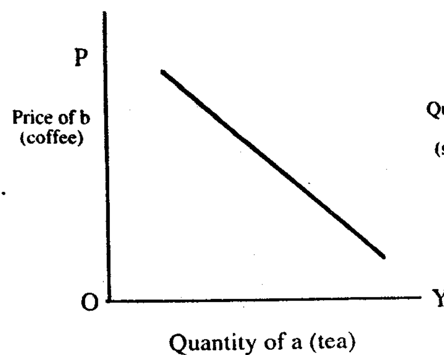


Diagram3 : the relation between the demand for a commodity and the price of a competitive commodity .

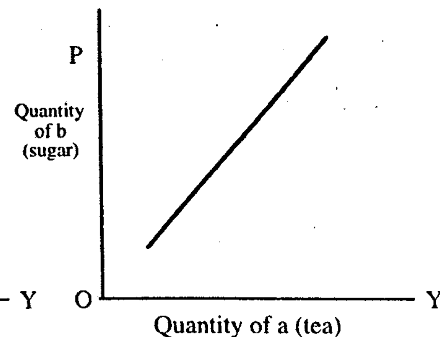


Diagram4 ; the relation between the demand for a commodity and the price of a complementary goods.

3 - The relation between the demand for the commodity and the consumer's income : $D_a = f(i)$: Other things being equal, an increase in the consumer's income has three possible effects on the quantity demanded:

a - in the most frequent case, an increase in income leads to an increase in the quantity of the commodity demanded by the consumer (during the period of time), and this with respect to all levels of income. This case is represented by the curve 1 on the diagram 5.

b - in a first exceptional case, an increase of income does not affect the quantity demanded. This happens in the case of commodities satisfying needs which are completely satsified at a certain level of income. Beyond this level, changes in income do not affect the quantity demanded. When the income of the family becomes high, her need for salt is already fully satified by a certain quantity of salt. Its demand for salt is not affected when its income increases after that. But it is imagined that the demand is affected when the family's income is too low even to enable it to satisfy all its need for salt. This case is represented by the curve 2 on diagram 5.

c - in a second exceptional case, an increase in income may lead, beyond a certain level, to a decrease in the quantity demanded. This happens in the case of relatively cheap commodities which represent poor substitutes to other commodities, as it the case of the inferior food commodities (like potatos and bread) which are replaced by other goods (like meat and milk) when the level of income reaches a certain level. The commodities whose demand decreases with the increase of income and the demand for them is represented by the curve 3 on diagram 5.

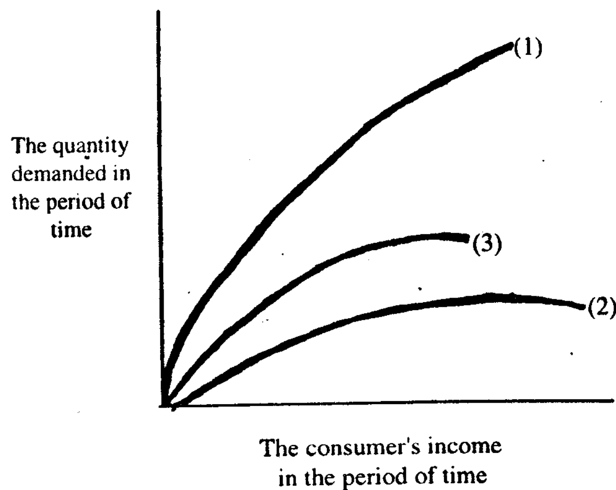


Diagram 5 : the relation between the demand for the commodity and the consumer's income

* Curve (1) shows the relation between demand and income in the most frequent case : both change in the same direction at all income levels.

* Curve (2) shows the relation between the demand and income in the case of commodities whose demand does not change with the increase of income after having reached a certain level.

* Curve (3) shows the relation between demand and income in the case of inferior goods : starting from a certain level of income, an increase in income leads to a reduction of demand.

3 - The demand for the commodity depends on the taste of the consumer and his preference : $D_a = f(T)$: The taste of the consumer summarises in one way or another the consumer's habit and preference which are determined basically by social factors considered as outside the economic activity, and fall, consequently, in the eyes of the Neo-classics, outside the framework of the demand analysis, despite the fact that the tastes of the consumers are influenced by advertising.

Whetever may be the way by which tastes are formulated they change and affect, by their change, the demand, other things being equals. If the consumer's taste changes favorably to the commodity, the quantity demanded will increase, and vice versa.

Those were the factors which determine the individual consumer's demand; they determine it collectively through the effect of each on the demand in a direction which differs from one factor to the other. Once the individual demand is determined we can shift to the market demand.

The passage from the individual consumers' demand to market demand.

As we want to arrive at the formation of the commodity's price on the market, it is necessary to have the total demand for the commodity, that is the demand of all the consumers. That is why we do not consider the study of the individual demand but a step towards the determination of this total demand.

The market demand is considered, in the eyes of the Neo-classics, as the sum total of the demand of individual consumers. Because, it is determined by the same factors determining the individual demand, plus the fact that the market demand is determined by the number of the buyers as well. It follows that the market demand can be derived from the total of individual demands. To achieve that, we can follow one of the two following ways:

1 - According to the first way, we start from the schedules of the individual consumers .. Then we add the different quantities which the individual consumers are ready to buy at each price.. The product is the quantity demanded on the market at that price.. If we suppose that the number of the buyers is 2,

and that they have the following two demand schedules, we can have the market demand and schedule:

P	Q
10	8
12	6
15	3
17	2

Demand Schedule consumer (1)

P	Q
10	12
12	10
15	7
17	4

Demand Schedule consumer (2)

P	Q
10	8 + 12 = 20
12	6 + 10 = 16
15	3 + 7 = 10
17	2 + 4 = 6

Market demand Schedule

Then, we can translate the market demand schedule graphically to have the market demand curve.

2 - According to the second way, we start from the individual consumers' demand curves, and add them horizontally to reach the market demand curve, as it is shown on diagram 6, assuming that we have two consumers.

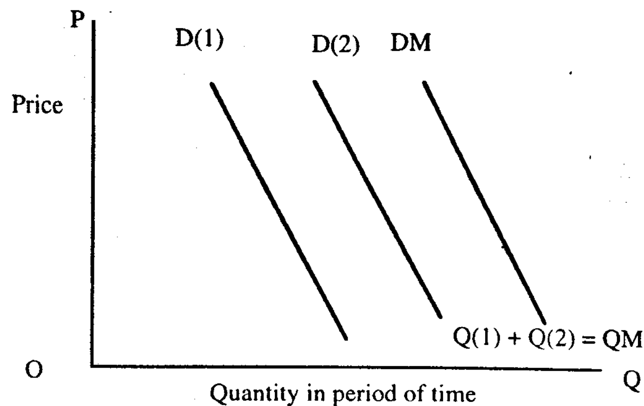


Diagram 6 : the market demand curve

* to obtain the total of possible purchases at each price we add the quantities of the consumers (1) & (2).
* as a general rule, qn = q(1) + q(2). In case of a big number of consumers, qM = q(1) + ... +qn.

* notice that the market demand curve has, in general, the main shape of the individual demand curve.

* when we talk about the conditions of demand on a certain market we mean the totality of the functional relation between all the different possible purchases and the corresponding prices.

Whether we adopt the first or the second way we are carrying out an intellectual operation, that is a conceptual operation which permits us to **deduce** the market demand. Because, in real life we hardly, reach informations relative to the individual consumers' demand curves, although we usually have informations concerning the general shape of the market demand.

Once we shift from the individual consumers' demands to the market demand, we have to add two other determinants to the list of factors which determine the market demand:

– the demand for a certain commodity depends on the **volume of population**. But this does not occur, of course, unless the increase in population is associated by an increase in the purchasing power, because an increase in the number of the needy people does not imply, in the capitalist society, an extention of the market. Any how, this factor is considered, when analysing the market demand, as an external factor.

– the demand for a certain commodity depends too on the **pattern of income distribution** between social classes and groups. If this pattern shows a bias towards the rich the demand for commodities consumed by the rich will increase. In the same direction, if this pattern is in favour of married people at the expense of the unmarried, the demand for the commodities consumed by the families, like the child commodities, would tend to increase.

Having seen how the market demand curve, which shows

the relation between the demand for the commodity and its price, is determined, it is important to add that this curve acquires a specific importance, as we have perhaps noticed, that the relation represented by such curve is the most apparent among all the relations implied in the demand function. What is the reason behined that ? the reason is not that the price is the most important of the factors which determine the demand (if we are to choose between these factors, no question that the consumers' income is the most important), but that we are interested at the moment in the theory of the determination of market price. Accordingly, it is more appropriate that price represents one of the existing variables : the demand and the price.

We have now the market demand curve. We repeat we have reached this curve through the individual consumers' demand curves. This was done, naturally, assuming that "other things are equal", i.e., assuming that the other determining factors the consumer's income, the prices of other commodities and the consumers' preferences, remain constant. Now, suppose that one of these factors (other than the price of the commodity) has changed, what would be the effect of this **change** on the market demand **curve** ? Changes of these factors evoque what is called the shifts in the market demand curve. Let us see what is meant by this.

Shifts of the market demand curve:

These shifts could result from changes in the consumers' income, in the prices of other commodities or in the tastes of the consumers. Let us see the effect of a change in each of these factors on the market demand curve of our commodity, supposing that its price remains constant:

1 - The effect of a change in income on the market demand

curve : Other things being equal, such change leads, as a general rule, to an increase in the quantity demanded, at each price of the commodity. This gives us a **new relation** between the **same price** and a **new quantity** . Graphically, the whole market demand curve is shifted to the right (see diagram 7):

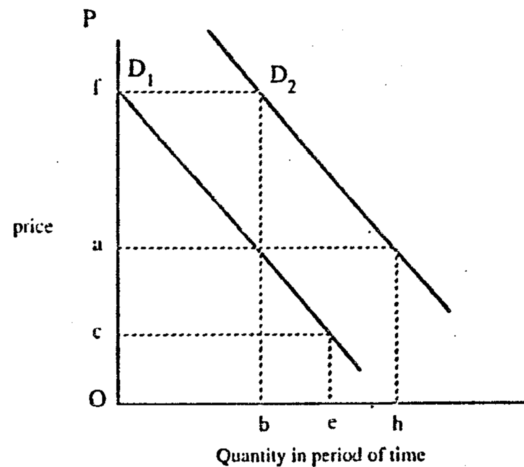


Diagram 7 : A shift of the market demand curve

* D_1 represents the relation between the demand for the commodity and its price, supposing that income is constant at a certain level, be it i(1), D_2 represents the relation between the demand and the price, supposing that income is contant at a higher level, be it i(2).

* the shift of D_1 to D_2 indicates an increase in the desired purchases at each possible price. E.g., at the price a, the quantity demanded would increase from ob to oh, thanks to the increase in income.

* we can express the effect of an income change in a different way : with the increase of income, the consumers are ready to buy the same quantity at a higher price. The quantity ob, e.g., could be sold at a higher price, the price of, when the demand curve is D_2.

In the case of our inferior commodity, an increase in income leads to a decrease in the quantity which the individuals are ready to buy at each of the market prices. The demand curve will shift to the left.

2 - The effect of a change in the prices of other commodities on the market demand curve : Here the effect would differ according to whether the other commodity is complementary to, or substitute of, our commodity:

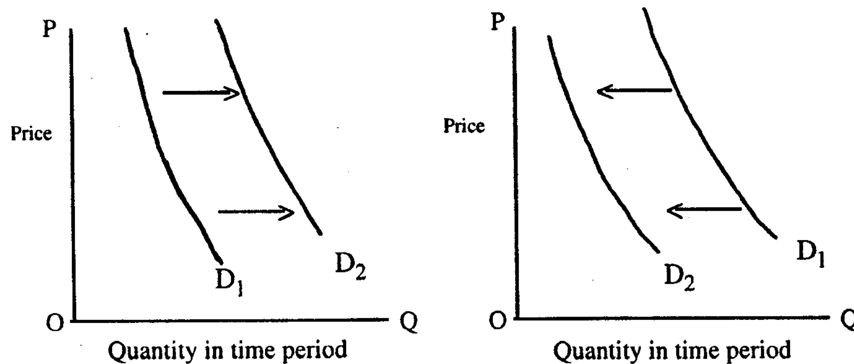
* if the other commodity is complementary, a change in its price would provoke a shift of the whole market demand curve to the left, indicating that the quantity demanded at each price will be less than before (e.g., our commodity is fuel and the complementary commodity whose price has changed is cars. A rise in the price of cars decreases the demand for cars and decreases, consequently, the demand for fuel at the different levels of cars' prices. Thus, the rise in cars prices provokes a shift of the market demand curve of fuel to the left, indicating that the quantity demanded of fuel will be less at each price).

* if the other commodity, whose price changes, is a competitive one to our commodity, a rise in its price leads to a shift of the market demand curve of our commodity to the right, indicating that at each price of our commodity more will be bought than before (e.g., our commodity is fuel and the substitute is public transport. A rise in the price of public transport leads the individual to use their private cars, a matter which increases their demand for fuel at each of the levels of its price. The demand curve for fuel will shift to the right).

3 - The effect of a change in tastes on the market demand curve : If tastes change in favour of our commodity this means that more will be bought of it at each of the levels of its price,

and its market demand curve will shift to the right. It will shift to the left if tastes change against the commodity.

In all, we can express, graphically, the ideas relative to the effect of a change in factors that we have supposed as constant while we were building up the market demand curve for the commodity, as follows (diagram 8):



(1) an increase in demand (at each price the quantity is bigger), provoked by :
* an increase in income
* a rise in the price of a substitute
* a fall in the price of a complementary commodity
* a change in taste in favour of the commodity

(2) a decline in demand (at each price the quantity is smaller), provoked by :
* a decrease in income
* a fall in the price of a substitute
* a rise in the price of a complementary
* a change in taste against the commodity

All this is related to the discussion of the effects of changes in the factors other than the price of the commodity on the relations between the demand and price. We can do the same to know the effect of changes of the other factors on the relation between the quantity and each of hte income, the prices of other commodities and the consumers' tastes, taking these factors successively one after the other.

Now, on the basis of our knowledge of the market demand curve as an expression of the relation between the quantity and price supposing that other factors remain constant, as well as our knowledge of the cases of the shift of such curve due to changes of these factors, we can make the distinction between:

* a **movement** on the **same** curve, and

* a **shift** of the **whole** curve to the right or to the left.

- a movement on the same curve (upwards or downwards) indicates a change in the quantity because the **price** of the commodity has changed,
- while a shift of the whole of the demand curve (to the right or to the left) indicates that the demanded quantity at each price will be different (i.e., will change) as a result of a change of one of **the factors other than the commodity price,** that is, income or the prices of other commodities or the consumers' tastes.

To make the distinction between these two sorts of movement, we have to agree on the language we use in expressing our ideas : it is possible to express a shift of the whole of demand curve by talking about an increase or a decrease in demand; and express a movement on the same demand curve by talking about a change in the quantity demanded.

2 - The Supply

As we did for the demand, we will try to define first the individual supply and the market supply, to reach, second, through the determination of the individual supply to the market supply.

The definition of the supply : in the Neo-classical jargon, the supply of the commodity on its market is supposed, be offered by the producer, the entrepreneur or the enterprise. Astraction is made of trade that might take place between the productive unit and the consumer.

By individual supply, or the supply of the individual entrepreneur, is meant the different quantities of the commodity which the entrepreneur is ready to offer in the market at

the different prices during a certain period of time. As in the case of the demand, the supply is expressed in terms of flows and not in terms of stock.

As for the **market supply,** it is meant the total different quantities of the commodity which all the entrepreneurs are ready to offer in the market at different prices through a certain period of time.

The determination of the individual supply : the supply is determined by a number of factors affecting it collectively. But each factor produces its effect in a certain manner and in a certain direction. Let us see the most important among these factors and the relation between each of them and the supply :

1 - The objective of the entreprise : the neo-classical theory assumes, in the framework of the mico-economic analysis, that the entrepreneur aims at the realisation of the maximum of profit. In this case, the individual supply depends on the factors which determine profit (the entreprises' total profit) as an accounting difference between the total revenue of the entreprise and its total costs. But, if it happens that a certain entreprise seeked to realise another objective (be it the avoidence of risks, e.g.), this other objective would affect the quantities supplied. It's effect would be, in any case far from profit. In what follows, we assume that the entreprise is aiming at maximum profit (or the least of loss awaiting future profit). On the basis of this assumption all the following factors affect the supply of the entreprise **through their effect on the profitability of the entreprise.**

2 - The price of the commodity produced by the entreprise : Other things (the cost of production included) being equal, the supply will be bigger the higher the price of the commodity produced and sold by the entreprise. Thus, we have to expect that with a rise in price the quantity supplied will increase and, vice versa.

3 - The prices of other commodities (the commodities produced in the other branches of production) : If the price of the commodity produced by the entreprise remains without change at the time when the price of the other commodities rise, this means

that the branches producing the other commodities became more profitable than the branch where our entreprise is producing. The production of the commodity in this branch becomes less attractive, a matter which leads the entreprise to diminish his supply of the commodity, assuming that other things remain unchanged.

4 - The prices of factors of production : To produce, the entreprise buys the different factors of production (Labour - power, land, machines, raw material, motor force, etc) on their markets. The cost of production is determined by the amounts used of these factors plus their prices. If the price of one of these factors, be it the land, rises, this leads to an increase of the cost of production in all the domains of activity where this factor is used, but not at the same percentage, since the relative importance of the factor of production is not the same in the different domains of production : the importance of land in an industrial activity is much less than in agriculture. Consequently, its share in the cost of production will be less in the first case than in the second one. If the price of land rises this leads to an increase in the cost of the agricultural product at a higher percantage than in the case of its utilisation in an industrial activity. As a result the profitability of the agricultural production will decline at a percentage higher than that of the decline in the profitability of industrial production. The supply of the agricultural product will diminish. It follows that a change in the prices of factors of production leads to a change in the relative profitability of the different productive activities, a matter which induces the entrepreneurs to change their supply of the different commodities.

5 - The state of technology : The level of scientific and technological knowledge determines the techniques (the technical methods which can be used in the production of different commodities, a matter which determines the amounts of the inputs used in the production of each commodity, and determines, consequently, its cost of production. With a change in such knowledge and the introduction of new production techniques (such as using a new sort of energy or a synthetic raw material .....) the cost of production changes and with it the profit (assuming that other

things remain constant), and hence the amounts supplied of the different commodities.

All that could be expressed by saying that, assuming that the entreprise is a profit maximiser, the supply of the commodity is determined by:

- its price
- the prices of other commodities
- the prices of factors of production, and
- the state of technology.

To state this differently :

$S_a = f(P_a, \ldots, P_{n-1}, P_{f1} \ldots + P_{fn} + G)$, where

S_a is the supply of the commodity; P_a is its price ; P_{n-1} are the prices of the other commodities; $P_{f1}, \ldots + P_{fn}$ are the prices of factors of production, and G is the state of technology.

This relation is called the **individual supply function.** It is complex relation which indicates that the supply of the individual entreprise is determined by all these together. That is to say that they unite to determine this supply. Consequently, a change in the supply depends on all these factors. If we want, hence, a precise determination of this supply we must study the effect of the change of all these factors at the same time.

But, since we are interested here with a general view of the theory of market price, it suffices to know how the supply of the commodity changes with a change in its price, assuming that other things remain constant. This means to study the relation : $S_a = f(P_a)$.

For this relation, we will be contented now by saying that the quantities which the entreprise is ready to produce and supply change directly with the price of the commodity. They increase with a rise in price and decrease with a fall in it, other things being equal. On the basis of this assumption, the higher the price, the bigger the profit, the more incentive the entreprise will have to produce more and increase the supply. We suppose the validity of this proposition within the framework of this general view of the theory of market price. The exceptions to this proposition and their implications are usually studied by the theory of the firm.

This relation between the different quantities which the individual entrepreneur is ready to put on the market at different prices (and which indicates that the quantity increases with a rise in price, and diminshes if it falls), this relation is called the **law of supply.** We can express it in number under the form of a schedule, called the **individual supply schedule,** as it follows:

Individual supply schedule

Price in money units : pounds	**Quantity in physical unit, in period**
5	4
10	8
15	11
20	13

This schedule could be expressed graphically to give the **individual supply curve,** usually drawn as a straight line (see diagram 9):

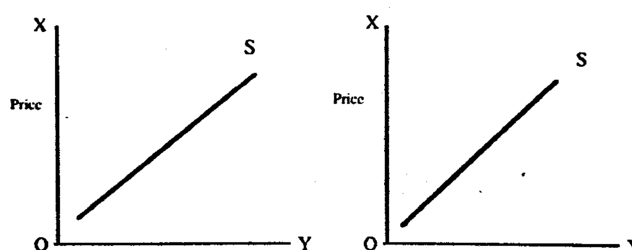


Diagram 9 : The Individual supply curve

* this curve slopes downwards to the left.
* it indicates that the supply is an creasing function of price.
* for simplicity, the curve is usually given the form of a straight line.

This curve has been obtained assuming that the other factors (other than the price of the commodity) remain constant. **The totality of this curve represents all the functional relations between the commodity supply and its price. It is the relation we mean when we talk about the supply. The movement on that curve indicates a change in the quantity the entrepreneur is ready to supply with a change in its price.**

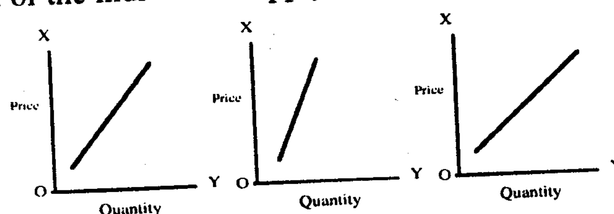
In this manner, the individual supply is determined. But, as

we are concerned with the formation of the market price, the determination of individual supply cannot be but a step towards the determination of the market supply.

The determination of the market supply:

In our intellectual perception the passage from the individual entreprises' supply to the market supply takes place as it happened with the passage from the individual consumers' demand to the market demand:

- either we start from the schedules of individual entreprises, add them together in a total schedule showing the quantities they are ready to supply at each price, and translate this total schedule graphically to have the total supply curve, i,e.,the market supply curve,
- or we draw the market supply curve through the horizontal addition of the individual supply curves (see diagram 10).



* to obtain the total supply at each price we add the quantities of the individual curves at each price.
* at each price, the market quantity is $Q_1 + Q_2$.
* the market supply curve has, in general the shape of the individual supply curve.
* when we talk about the conditions of supply on the market we mean the whole of the functional relation between the total different possible quantities and the prices to whom they correspond.

This market supply curve, which shows the relation between the different quantities which the entreprises are ready to put on the market at the different prices (during a certain period) has been elaborated on the assumption that the other factors affecting the commodity supply remain unchanged It remains to see what would be the effect of a change in these factors on the mar-

ket supply curve, an effect which reflects itself, graphically, in a shift of that curve.

Shifts of the market supply curve

The shift of the whole of the market supply curve results from a change in one of the factors (other than the price of the commodity) affecting the supply. It indicates a change in supply (and not in the quantity supplied).

As we did with the demand curve, it is important to make the distinction between a movement on the same supply curve (indicating a change in the quantity supplied due to a change in the price of our commodity) and a shift of the total curve (reflecting a change in supply due to a change in one of the other factors affecting the supply of the commodity : the prices of other commodities, the prices of the production factors and the state of technology). What are the changes that might provoke a shift of the supply curve? The possibilities of such shift are shown on diagram 11.

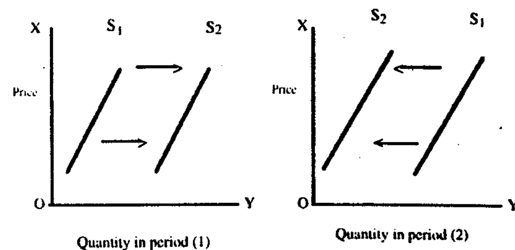


Diagram 11 : Shifts of market supply curve

*(1) an increase in supply : entreprise are ready to produce a bigger quantity at each price. This might result from :
- an improvement in production techniques,
- a fall in the prices of other commodities,
- a fall in the prices of the used factors of. production

*(2) a decrease in supply : the entrepriese tends to produce less at each price. This might result from :
- a deterioration in the technology used,
- a rise in the prices of other commodities,
- a rise in the prices of factors of production.

*   *   *

Once both the market demand for, and the market supply of, the commodity are determined, we can push the analysis to a new dimension : marry the two theories to have a theory of the determination of the market price of this commodity.

3 - The market Price

Having reached this stage of the analysis process, it becomes necessary to pronounce clearly the **form of the market** on which the price of the commodity is determined. This is because the rules of the games differ, with respect to the formation of prices, according to the degree of competition dominating the market. The different forms of the market are usually studied by the theory of the entreprise (the theory of the firm) and in the field of industrial economics; we limit ourselves in our context to the definition of what is called the **perfect competition market**; as it represents the sort of market on which the forces of demand and supply meet to determine the price of the commodity, within the framework of this general view of the theory of price formation. Once defined we see how price is determined on the market, to end with a summary of this elementary theory of price.

The conceptual image of a perfect competition market is drawn up on the basis of a number of assumptions respresenting the conditions that have to be fulfiled for the market to have a perfectly competitive form. These conditions are :

1 - that the number of buyers and sellers is so big that the quantity bought or sold by each of them is too little to affect the price of the commodity significantly.

2 - that all the buyers and sellers have a perfect knowledge of the market conditions, i.e., of the quantities supplied and demanded and the price dominating the market, as well.

3 - that the units of the commodities (and it is a matter here of the different units of the **same** commodity) are homogenous, in the sense that the units produced by one entreprise are perfect substitutes for the units of the commodity produced by the other entreprises. In other words, the units of the commodity are homogenous if they are all the same in the eyes of its consumers.

4 - that there is no intervention in the free action of the forces of the market, that is, no state intervention in the determination of.prices, nor any agreement between the buyers, themselves, or between the sellers. According to this condition, there must be also a free entrey to the marekt, in the sense that the entreprise is free in entering the branch of producing the commodity and free to leave it if it finds it unprofitable.

If these conditions are satified, it is implied that the commodity world have a single price during a certain period of time, dominating all the corners of the market, be it local or national or international.

The determination of the equilibrium price on the perfect competition market.

Here, it is a matter of one commodity, be it the commodity A. To show how its market price is determined we start from the results obtained from the analysis of demand and supply. That is to say that our starting point would be:

- The market demand
- the prices of other commodities, the prices of the factors of production and the state of technology remaing unchanged. We assume too that this curve is sloping downwards to the left : the quantity supplied changes in the same direction as that of price change.

The price of the commodity A is determined through the interaction of the market demand and the supply demand, as shown on diagram 12.

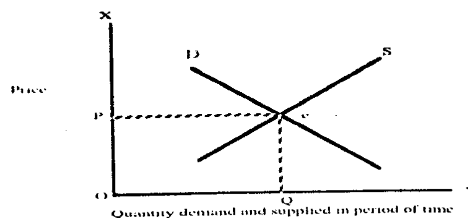


Diagram 12 : The determination of the equilibrium price and the quantity in the perfect competition market

* at the point of intersection (of equilibrium) the price is op and the quantity effectively bought and sold OQ
* the curves show the possibilities of purshase and sale at different prices.
* if the 2 curves keep their forms there is only one price at which the quantity demanded is equal to the quantity supplied.
* at a price higher than op, the quantity supplied is bigger that the quantity demand, we have an **excess of supply,** purshing the price downwards.
* at a price lower than op, the quantity demanded is bigger than the quantity supplied, we have an excess of demand, pushing the price upwards.

Let us, now, develop the ideas presented while explaining diagram 12. **The price of the commodity changes when the demand** is not equal to supply (when there a demand excess or a supply excess) :

- in the case of a demand excess, the consumers whose needs are not fully satisfied would propose a higher price hoping to obtain a bigger quantity of the commodity. Meanwhile , the entrepreneurs, who remark that they can sell a quantity bigger than the quantity they produced, would ask for a higher price for this bigger quantity. For one of these two reasons or for both, the existence of a demand excess represents a force pushing the price upwards and the price rises.
- in the case of a supply excess, the entrepreneurs, who cannot sell all the quantity they produced, start to ask for a lower price. The consumers, having noticed the existence of an unsold quantity, start to propose a lower price. For one of these two reasons or for both of them, the existence of a supply excess represents a force pushing the price downwards, and the price falls.
- we have, almost, a narrative description of the operation of bargaining between the buyers and the sellers!

The equilibrium price : from all what we said, we see that:

- for all the prices higher than op, the price tends to fall,
- for all the prices lower than op, the price tends to rise,

- at the price op, there is no excessnother, in demand, nor in supply. Since the quantity demanded equals the quantity supplied, the price does not tend to change.
- the price op, at the point where the two curves intersect (which is the price which equalises demand and supply) is the price towards which the market tends. It is the only price where there is neither excess of demand nor excess of supply.
- this price is called **the equilibrium price.** The term equilibrium means a state of balance (between the different forces which affect the system). According to this theory the equilibrium is realised when the consumers want to buy the quantity which the entrepreneurs want to sell. Since there is no excess in demand or supply, the price would not tend to change. When the quantity demanded equals the quantity supplied, it is said that the market is in a state of equlibrium. If the two quantities differ, the market is considered in a state of disequibrium.

Now, we can **summarise this formal (elementary) theory of the determination of the market price for a certain commodity:**

*** the assumptions:**

- the market demand curve slopes downwards to the right.
- the market supply curve slopes downwards to the left.
- a demand excess pushes the price to rise and a supply excess pushes it to fall.

*** these assumptions imply:**

- that there is only one single price at which the quantity demanded equals the quantity supplied.
- if any of the curves (of demand and supply) shifts, i.e., if the conditions of the market change, the equilibrium price and the equilibrium quantity change.

*** shifts of the curves of demand and supply :**

- what would be the effect of such shift on the equilibrium price and the quantity bought and sold?
- to know this effect, we have :

* to distinguish, first, between the shifts of the demand curve and the shifts of the supply curve,

* to add, second, the method used in arriving at this effect. This method could be summarised as follows:

a) to start from a position of market equilibrium,
b) introduce the shift in one of the curves (the factor expected to produce the effect),
c) to find out the new equilibrium position, the market equilibrium, for the price and the quantity,
d) to make the comparaison between the two equilibrium positions, the new and the old, to see the effect on price and quantity.

Let us move to the utilisation of this method :

1 - Shifts in the demand curve : diagram 13 shows the effect of such shifts on the equilibrium price and quantity.

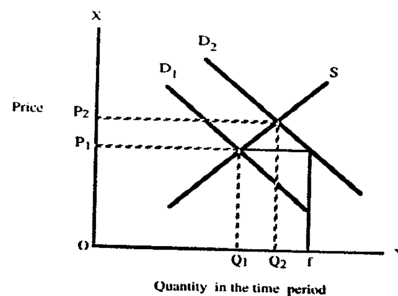


Diagram 13

* D_1 & S are the original curves of demand and supply.
* the point of thier intersection is the starting equilibrium position. at this point, OP_1 is the equilibrium price and OQ_1 is the quantity demanded and supplied.
* the demand curve shifts to D_2 due to an increase of incomes, e.g..
* this shift to the right evoques a demand excess, since at the price OP_1, the quantity demanded becomes equal to of while the quantity supplied remains at OQ_1, the excess = q, f.
* with the demand excess, the price tends to rise, limiting some of the cosnumers' demand and inviting the entreprises to increase their supply. The price is pushed upwards to a new equilibrium position.
* at the new price, OP_2, the quantity demanded = the quantity supplied = OQ_2. This quantity is bigger than, OQ, and less than Of.

* if we imagine that D_2 curve the original were shifting to the left indicating a decrease in demand, the new equilibrium price will be lower and the quantity smaller.

From diagram 13 and the ideas explaining it we can explicit the following **results** :

- An increase in the demand for a commodity (expressed by a shift of the demand curve to the right) produces :
* a rise in equilibrium price, and
* an increase of the quantity bought and sold at the new equilibrium position.
- A decrease in the demand for a commodity (expressed by a shift of the demand curve to the left) produces :
* a fall in equilibrium price, and
* a decrease of the quantity bought and sold at the new equilibrium position.

2 - Shifts in the supply curve : Applying the same method on these shifts their effect on price and quantity will be as shown on diagram 14.

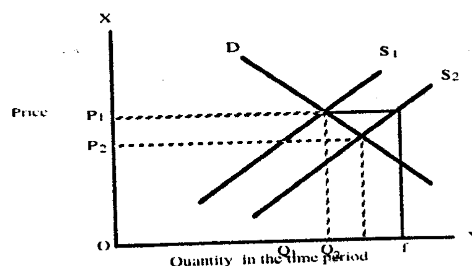


Diagram 14

* D & S, are the original curves of demand and supply.
* the point of their intersection is the starting equilibrium position, at this point, OP_1 is the equilibrium price and OQ_1 is the quantity demanded and supplied.
* the supply curve shifts to S_2 due to a decrease in the cost of production , e.g.
* this shift to the right evoques a supply excess, since at the price OP_1, the quantity supplied becomes equal to of while the quantity demanded remains at OQ_1 , the excess = Q_1 f.
* with the supply excess, the price tends to fall, limiting some of

the entreprises' supply and inviting the consumers to increase their demand : The price is pushed downwards to a new equilibrium position.

* at the new price, OP_2 , the quantity demanded = the quantity supplied = OQ_2. This quantity is bigger than OQ, and less than of.

* if we imagine stat S_2 were the original curve sshifting to the left indicating a decrease in supply, the new equilibrium price will be higher the equilibrium price and the quantity smaller.

From diagram 14 and the ideas explaining it we can explicit the following results :

- An increase in the supply of a certain commodity (which is expressed by a shift of the supply curve to the right) produces :

* a fall in equilibrium price, and

* an increase in the quantity bought and sold at the new equilibrium position.

- A decrease in the supply of a certain commodity (expressed by a shift of its supply curve to the left), produces :

    * a rise in equilibrium price, and

    * a decrease in equilibrium quantity.

The verification of the validity of these four results allows us, when their validity is proven, to talk about the **"laws of demand and supply"**.

*   *   *

In this way, we finish with this elementary theory of the determination of the market price according to the Neo-classical vision. We say elementary because further analysis should be carried out to know how the demand curve and the supply curve are formed and how the price is formed on the different forms of the market. This is done by the Neo-classics through the theories of consumers behaviour, of the firm and that of the equilibrium of the industry. But, these theories represent an integral part of total Neo-classical theoretical building.

*   *   *

Having seen the methodology of building up this Neo-classical formal theory of the market price, its mode of reasoning raises two critical points:

- First, it is argued that the market price of the commodity is determined by the interaction of its **total** demand with its **total** supply. But to reach the total of these two forces **we** start from the **individual** demand and the **individual** supply. to have these two "individuals" it is **supposed** that the **price** of the commodity is determined on the market and taken as given by the individual consumer and the individual entreprise, **In the begining of the process of reasoning we take as given what we want to determine at its end. Are - we in presence of a sort of circular reasoning?**

- Second, by the end of the process of reasoning we find that the market price of the commodity is determined by the interaction of the two **opposing forces,** and it is determined at the point where **they are equal** to each other. Faced with the general scientific law according to which : when two opposing forces meet, at the point of their equality they neutralise each other and the function will be equal to zero; they would determine nothing; faced with such law, are we dealing with an unscientific reasoning whose outcome become a dogma thanks to the continous unthoughtfull repetition of it?

* * *

We hope now that our glance over the history of Political Economy has elucidated its nature as a social science interested in the economic activity as a social activity of the production and distribution of what is necessary for the satisfaction of material and cultural needs of the members of the soecity. **Although our science deals with all the modes of prodution, that is, with the specific form of the economic process in all the social formations which the history of human society has witnessed, most of its theories deal with the capitalist mode of production which began to rise, as we have seen, with the 15th century and contiune its development uptil now.** Such mode of production is characterised, mainly by the private onnership of the means of production, becoming the material object of capital as a social relation implying that the dominant form of labour is wage-labour : labour - power becomes a commodity to be sold and bought on the "labour market". The entreprise, the capitalist unit of economic activity (in material production especially industry,

trade and finance) is owned privately and thus managed privately. It produces for exchange, for the market, commodity production becoming, hence, the most generalised, not only within societies but also on an international level. Money is inensively used in all the corners of the economic activity. Monetary gains become the immediate objective of those who participate in the economic activity. For the entreprise, this immediate objective is the maximisation of monetary profit, the motor motive of the economic decisions of investment and production. **The satisfaction of needs of the members of the society is legated to a second stage on the economic scenery. It is to be realised through profit maximisation and the mechanism of prices which became the basis of all economic decisions**. Such decisions are taken, independently, by the individual economic units on the basis of prices on the different markets, in such a manner that the **organisation of the overall economic process is taking place spontaneously and in a sort of à posteriori manner, through the forces of the market guided by the movement of prices as determined in correspondence with the value of commodities.** This is usually expressed by saying that the economy is organised, in its action and development by the law of value and prices, acting through the market mechanism, with a historical tendency that the form of market becoming more and more monopolistic.

With respect to this **capitalist mode of procution :** its nature, its action as a process of procution and reproduction (with its both real and monetary aspects) according to the law of value and prices, its social results in terms of pattern of distribution of incomes (wages, rent, interest and profit) between social classes and their conditions of living, with whatever role of the State in economic life in its variation from one stage of capitalist development to the other, its development over time within different societies and on the level of international society and finally its historical fate, that is its place in the process of human history; we say, with respect to this mode of production, we have seen, through our study of the history of Political Economy, that we can distinguish at least three main economic

theoretical streams, each elaborated through a certain vision of the object and method of Political Economy:
- the stream of economic thought of the Classical School,
- the stream of economic throught of the Marxist school, and
- the stream of economic throught of the Neo-classical school.

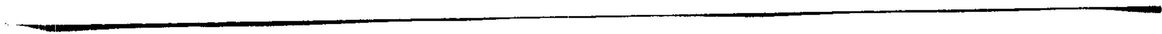
A balanced study of the political economy of capitalism should cover, critically, these three streams of thought in their perpetual development, in order to have, first a balanced theoretical knowledge with its different tools of analysis, and to come out, second, with a thorough scientific comprehension of the economic system in which we are still living, in a society making a part of the "underdeveloped" section of the international capitalist economy. Unfortionatly, this is not usually the case, as the bias in our economic teaching is towards the least scientific of all streams of thought: the Neo-classical stream.

We hope now that our further studies of the different economic theoretical constructions will be armed by this methodological consciousness.

Having observed this in our presentation of the theory of value and price between the classics and Marx and that of the market price advanced by the Neo – classics, let us test the availability of this methodological consciousness by the study of the theories of income distribution related to the capitalist economy.

Chapter Three

Theories of Income Distribution



The place of explaining the primary distribution of the social product between social classes is the same place where we look for the value of such product: it is the place where we look for how the process of social labour is organised in this historical form of production that is the capitalist exchange production. This implies that it is starting from the theory of value that we can arrive at the theory of distribution. It becomes, hence, natural to recall the essential social relation: capital / wage labour, which implies the property of a certain social class of the means of production and the divorce of another social class from such means, so that the members of the later class are transformed into wage labouerers owning their labour-power as a commodity.

The land continues to be the object of private property as it was in the feudal economy, but not in the form of a class property, but rather as an individual property, during a transitional period to capitalism: The land becoming in a subordinate position with the development of the mobile wealth, not only as a wealth, but also principally as a value in exchange, especially in its monetary form. A matter which points to the relative feebleness of the landed property as confronted with property of the mobile means of production. This relation capital / labour becomes the axis of the economic process which is materialised in the social product represented in a quantity of commodities (material as well as services) utilised in the satisfaction of final needs (like food) or re- utilised in the process of production (as the machines). This process creates simultaneously a certain quantity of monetary incomes representing the monetary gains acquired by the different partners of the process of production: the workers, the landlords, the owners of the loanable money capital and the owners of the

enterprise itself. It is the social product in its monetary form which is distributed at a first stage among these partners.

This primary distribution, realised in a monetary form, takes place at the end of the production phase of the economic process. Each obtains his income in a monetary form. At a 2nd stage, each starts to use his income, spending it on the purchase of commodities (with the possibility for some to save a part of it). If prices change, between the moment of acquiring his **money** income and moment of spending it on the market, his **real** income will diminish: i.e., the quantity of real commodities obtained by the expenditure of his money income will shrink: his real share in the social product will be reduced. The same result occurs if the state holds, through a levied tax, a part of the individuals monetary incomes to assure a financial resource for itself. This means that the primary production of income could be modified through changes in prices over time or through the state intervention or through both. In such cases it is the final distribution which determines the share of each social class (and its individuals) in the social product and its possible utilisation in the satisfaction of needs (consumption) or in the process of reproduction (investment and new production).

What preoccupies us, in this contet, is the primary distribution of the social product in its monetary form (i.e the distribution of the national income). To study the theory which explains it between the Classics and Marx we have:

- To determine, at a first stage, the general concept of distribution.
- To crystallise, at a second stage, the general methodology of this theory.
- To see, starting from such methodology, the theories of distribution of the Classics and Marx.

Section One

The general conception of the theory of distribution between the Classics and Marx.

The general conception of the theory of distribute is determined by:

1- That such theory presupposes a theory of production based on a labour theory of value as a basis for the determination of the market price.

2- That the process of production rassambles three social classes effectuating three economic functions:

- The aristocratic class which offers land to be used in the economic process, with no participation from its owners to the labour process.

- The capitalist class which owns the means of production, the capitalist enterprises and operates such enterprises in the economic process: its members might participate to the administration of the enterprise, and this participation is an element of labour, and they might not participate.

- **The working** class which does not own the means of production but owns its labour-power as a commodity, and offers it to be used in the process of production.

3- Starting from this **modality** of **production** the shares of social classes in the product of the economic process are determined: The working class receives **wages** (which include salaries), the aristocratic class receives the **rent** and the capitalist class receives **interest** (when owning loanable money capital) and profit (when owning an enterprise). Theoretical concepts of such shares have been defined through big theoretical efforts effectuated especially by the fore-runners of the Classics

such as the encyclopedists in France.: first, to conceive the possibility that the surplus of the economic process, which was called by Francois Quesnay the "net product", can take a form other than the land rent which represented the only form of surplus in the European Feudal society. And second, to arrive at the distinction between interest and profit starting from the development of capital in its monetary form, a distinction which exacts a differentiation between the possible utilisations of money capital. which could be used **passively**, either by lending it to another person as a loan procuring to the lender a current monetary income during the loan period, the **interest**, or by buying (with money capital) land to be rented to others procuring to the landowner a current monetary income, **a rent**. Besides, the possibility of a **positive** utlisation of the money capital started to appear under the form of building up a capitalist enterprise, industrial or agricultural, employing wage labourers and producing commodities to be sold on the market, with the objective of procuring a new sort of current monetary income to spread with time to become, with the wages, the dominant incomes in the capitalist society. This new sort of money income in **profit.**

4- The problem that poses itself is how the social product is distributed among the social classes and strata gathered together in the process of production? How the share of each of these social forces is determined **in relation** to the shares of the others? **This implies that not** a single **share could** be taken in isolation; for it is a matter of a distribution which determines the position of each social force in relation to the other forces, and determines, accordingly, the power relations between the social classes constituting the society.

5- The pattern of distribution defines the money incomes of the social classes. On the light of prices prevailing in the market and the state's policy towards these incomes (from the viewpoint of taxation and subsidies) in dispensing its incomes each class or stratum or individual acquires his share in the social product.

6- For the determinants of distribution in general, the pattern of product distribution is defined in its money from as the net of what the community produces during a certain period usually the year, is defined by the nature of the process of production judging by the nature of the production process in the capitalist society, the social product is distributed, as a general rule, on the basis of the following factors:

a) Labour and its productivity, it is the factor evoked for the majority of the members of the society given the fact that they are divorced from the property of the means of production and transformed into wage labourers.

b) The quantity (and quality) of means of production owned by the individual, within his class, which enables him to appropriate a part of the social product. When the control of an individual or a group over the means of production surpasses a certain level, this gives him an additional economic power enabling him (or them) to appropriate a bigger part of the social product in relation to the shares obtained by the other classes or strata. This last point was the object of a particular emphasis by Marx while dealing with the phenomenon of the concentration of capital in the hands of the capitalist class vis –a –vis the other classes, and the centralization of capital in the hands of a few number within the capitalist class itself.

* * * *

In this way the general conception of the theory distribution is defined. But, how the shares of the social classes are qualitatively determined? This is clarified by the general mythodology adopted by Classics and Marx.

Section II

The general methodology of the theory of distribution

For the Classics, the general method is represented in the following steps:

1- From a theory of production, based on the labour theory of value as a basis of the market price, to the theory of distribution.

2- The principal idea for value is that labour is the source of the value of the commodity. Labour is, hence, the creator of the social product, using for that the material forces of production at the disposal of the society.

3- What is necessary, then to guarantee the continuity of production, from the society's point of view, is to compensate what has been used as means of production during the given period, and to guarantee the life of the labour force to offer its labour-power during the next period. What is exceeding these two items of the product represents a surplus.

4- Accordingly, The social product - the Necessary product = the Economic surplus.

5- The Necessary product is constituted (from the society's viewpoint) first of the value of what is used from the means of production, with the purpose of compensating what has been depreciated and assuring the continuity at least with the same amount of means of production. Another constituant of the Necessary product would be the value of the labour power of the labour force, necessary for its continuity over the next period. This last part of the

necessary product represents, as a part of the social product, the share of working class in the social product.

6- The Economic surplus remains to represent the share of the other classes implicated in the economic process given their ownership of the means of production, including land: the landed class and the capitalist class with its different strata (owning the loanable money capital, owning the enterprises in industry, agriculture and the other domains of the economic activity and owning the commercial enterprises). These two classes share the economic surplus between them (the share of the capitalist class is to be distributed, in its turn, between its different strata).

7- In this way is crystalisd, qualitatively, the shares and with them the basis of their determination reflecting the contradictions on the level of class interests contained in the economic process:

a) The contradiction between the working class (whose labour produces the social product) and the classes owning the means of production which appropriate, thanks to such ownership, the economic surplus with its vital importance for the future life of the society, with such surplus embodying the sources of the possibilities of the future expansion of production (savings and hence investment creating new productive capacity): the working class receives wages (a counterpart of a part of the necessary product) and the property classes the rent, the interest and the .profit. At the first stage of capitalist development, the stage of building up the conditions of capitalist production, the contradiction is principally between wages and profit and interest, on one side, and rent on the other side. (This contradiction is the strongest according to Ricardo) (given a sort of cohesion between the classes of the new society vis- a – vis the forces of the feudal society). But, with the development of capitalism and the gradual

withering of the aristocratic class, is accentuated the contradiction between wages and profit (and interest) to become the principal contradiction.

b) The contradictions within the owning classes: the landed aristocracy and the capitalist class, given the fact that they share the economic surplus between them. For one of them, the landed property, has a historically reactionary role during the period of the construction of the capitalist society. And for the other, the capitalist class, a progressist role during this period. Adam Smith and David Ricardo condemn the landlords, for "they love to reap where they never sowed". Ricardo takes an attitude in which the economic thinking is interlaced with the daily political practice, in his opposition to the Corn Laws in England, which levy costum duties on the importation of corn from Europe and cause a rise in the prices of cereals (the main food of the working class) in the interest of the landowners leading to an increase in monetary wages, which threatens profit, jeopardizing the interest of the capitalist class.

Starting from this general methodology of the classical theory of distribution, we can understand the general methodology of the theory of Marx.

1- The basic **social relation,** in its embryo, in its emergence and in its becoming, in the new socio-economic organisation, i.,e the capitalist organisation, is the relation capital /wage labour, which is realised as a social relation through the intermediary of material things represented by the means of production. It is this relation which determines the principal contradiction in the capitalist society, as a general historical tendency which does exclude neither the existence of other contradictions nor the specific importance of a certain contradiction at one or another historical moment of this social formation. As for the existence of the landed class in

Western Europe during the 19th century it is the existence of a class living the phase of its historical disappearance. But, as long as it is still existing, controlling land, it appropriates a part of the social product.

2- The theory of distribution is founded on the labour theory of value which explains the principal law of the organisation of production and distribution in the new economy, that is the law of value and price.

3- The basic idea concerning the value of commodities is that **social labour** is the source of value, and is, hence, the creator of the social product which represents, in its money from, the social income.

4- In the process of production the capital engaged in production is materialized in a **constant capital**, used in its money form for insuring the means of production (durable as well as current) and in a **variable capital**, spent, in its money form, for the purchasing of the **labour-power**, which gives, in the effective process of production **labour**, the creator of the produced value.

This **produced** value (the social product) - the value of the used means of production (durable and current) = **the net** value for the society.

The Net value – the necessary product (what is necessary for insuring the labour-power) = **the surplus-value.**

5- The necessary product is determined by what is necessary to guarantee the availability of a wage labour force to effectuate the process, i.e., that variable part of the capital engaged in such process. It is, effectivity, the part necessary for the reproduction of this labour force, whose continuity represents the condition, sin quo non, of the continuity of the capitalist production over time. The necessary product in this sense is not subtracted from the total product, but from the net product. And the

result would be represented in surplus-value, which represents the immediate objective of the investment and production decisions taken by the class owning the means of production, being, accordingly, the specific historical form of the economic surplus in the capitalist economy.

6- On this basis, given the fact that investment and production decisions are, under this sort of social organisation, the monopoly of the class owning the means of production in the form of capital, what would be a net value or a product will be defined, not necessary from the viewpoint of the society as a whole but from the viewpoint of the denominating class in the society, that is the capitalist class, ie. from the angle of what this class is looking for immediately when taking the production decisions. Here, the comparison shows the difference between the Classics' methodology which does not see the historicity of the capitalist production and the methodology of Marx which emphasises this historicity. Accordingly, the ideas formulated by the Classics are a-historical, i.e, generalised to the societies in general, while the theoretical categories of Marx are historical, i.e. related to the capital social formation without generalising to cover the other forms of social organisations, forms which should have their specific theoretical categories expressing their historical nature and the specific modes of operation proper to them.

7- Accordingly, the principle contradiction appears clearly between the part of the net value corresponding to the value of the labour-power considered as the product necessary to gurantie the continuity of the labour force, and the part of net value representing the surplus –value appropriated by the capitalist; the owner of the enterprise who rents the land from its owner and cedes him a part of the surplus value representing the rent and borrows money capital from its owner and cedes him a part of the surplus-

value representing the interest, to keep finally, in his quality as the proprietor of the enterprise, the profit. The surplus-value is decomposed, hence, into rent, interest and profit, but with a clarity in the concepts especially those of the interest and the profit (which were not always clear in the writtings of the Classics), as well as the clarity of the contradictions within classes owning the means of production: between the capitalist class and the landed class, on one hand, and, within the capitalist class between the owners of the enterprises and those of loanable money-capital (or financial capital), on the other hand.

That is the general methodology of the theory of distribution through which the Classis and Marx conceive the modality according to which the social product is distributed, in its money form, between the different social classes engaged in the economic process. The question which poses itself now is: how the different shares are determined **quantitatively**? The answer is given by the different theories concerning the different shares, between the Classics and Marx.

Section Three

Theories of distribution concerning the shares in the social product

It is natural that we expect now to have theories of wages, of rent, of interest and of profit. It is expected to be clear to us now that all these theories are all included into the general concept of the theory of distribution and hat they are all formulated according to the general methodology of such theory. In presenting these theories we will limit ourselves to their basic idea, between the Classics and Marx (the detailed theories usually presented in books of the history of economic thought).

1- <u>The theory of wages:</u>

Wage is the price of the labour-power[1] as a commodity, that is the price paid for the purchase of labour-power on the labour market. The theory of subsistence, elaborated by the Classics, is considered one of the oldest theories explaining the phenomenon of wages. This theory existed, in its primary form, in the wittings of W. Petty, Richard Cantillon and François Quesnay, and developed by David Ricardo and Malths. According to this theory, the price of labour on the market (and the Classics do not

[1] It is important to recall here the necessity of making the distinction between labour-power and labour: labour-power is the physical and intellectual capacity of the labourer to be, potentially, a human productive force i.e, to participate to the process of production. This capacity exists as long as the labourer is capable physically and intellectually to carry out the conscious effort. It is in the effective process of production that this capacity is used given the other conditions of production especially the means of production, to materialize **labour** in the form of a certain effort during a certain period of time: labour is then the effective expense of sweat and blood in using the means of production to produce products. The unemployed labourer has a labour-power to use, but he does not use it, (when lacking employment opportunity), he does not materialize any labour. What becomes a commodity in the capitalist society is labour-power and not labour.

make the distinction between labour and labour-power), that is to say the wage, depends on the subsistence level for the labour owners. Wage oscillates, hence, arround what is necessary, socially, for the continuity of the labour force, i.e, the quantity of goods necessary for the life of labourer and his family. Such goods represent for the society the cost which is "necessary to enable the labourers, one with the other, to subsist and to perpetuate their race, without either increase or diminution". "In other words, the price of the labour-power" depends on the price of the food, necessaries and conveniences required for the support of the labourer and his familly "(Ricardo, the Principles, p 52). What is "necessary" for the labourer's life is determined by the habits and traditions to represent the subsistence level. Accordingly, in the substance level is implied in a certain level of necessaries socially elaborated. The subsistence level determines, hence, the socially necessary products for the continuity of the labour force. And the productivity of labour in the production of these products determines the **value** of labour-**power** (as a commodity), which represents the **"natural price"** arround which oscillates the **current price** in the market, that is the monetary wage, according to the momental condition of the labour market. So, when the labour-values necessary for the life of the labourers (and his family) change, and hence their prices, a change in wages would follow.[1]

[1] As for the wage fund theory, stated by J.S. Mill and N. Senir (1790-1668), it puts, the emphasis on the demand for the labour force. It conditions capital as a sum of, a part of which is devoted to the payment of labourer's wages before the realisation of the produced product. Accordingly the demand for labour is determined by the quantity of available capitals the stock of capital this quantity changes directly with the accumulation of capital. (i,e. its increase, in its different forms) and from one period to the other). Starting from the amount of capital allocated for the payment of wages. we can arrive at the level of wages by an arithmatic operation of division: the amount of money capital destined, a prior, to the payment of wages, that is, wages fund, to be divided by the number of labourers seaking employmention the market.

For Marx, the market price of the labour-power (and he makes clearly the distinction between labour-power and labour) cannot go far from its value for a long time. The value of the labour-power (as a commodity) is determined in the same way as values of other commodities. It is determined by the amount of **socially** necessary labour for the production of the goods necessary for the life of the labourer and his family.

But, the labour-power differs from the other commodities by the fact that in the determination of its value enters a social factor, that is a historical factor. Since such value is not determined, only by what is necessary for the continuation of the physical and intellectual existence of the labourer and his family, within the framework of the social stratum to which he belongs, but also by "the level of living customarily existing" in **each** society. With this value, the commodity labour-power reaches the labour market to represent the starting point in the determination of the monetary wage (the price of the unity of labour-power on the market). Starting from this value, the monetary wage depends on the interaction between the forces of demand and supply of labour-power, and the fluctuations of such forces lead, when they are not equal, to fluctuations in the monetary wage on the market arround "the production price" of the labour-power.

The **concept of the industrial reserve army** plays a specific role in Marx's theory of wages. This concept could be presented, simply, as follows: according to the pattern of income distribution which is determined principally by the ownership of the means of production by a relatively small minority and the transformation of the majorty into wage

labourers, their relative part in the net value produced is limited (in relation to their number). It follows that their purchasing power will be limited in relation to what is produced according to the productive capacities of the economic process. Meanwhile, the capitalist class will have (with its relatively big share in the national income) a saving capacity with which savings are not necessarily translated into a demand for the investment commodities, given the fact that such demand depends on the profit expectations in the future. This implies that total demand (the demand of the different classes) usually comes at a level which does not absorb all what is produced for the market; which means a tendency of the production level to be relatively low. A matter which might imply, and usually implies, the non-utilistation of all the existing productive capacities. This means an unemployment for a part of the labour force in a quasi-permanent manner; especially when the necessary wage tends (in the case of a production expansion and an increase in the demand for labour-power) to rise threatening profit (in the case of competition). It results a tendency towards the existence of a part of the labour force permanently unemployed (with a continuous change in its individual labourers, of course) representing a sort of a **"reserve" of unemployed labour force existing quasi-permanently on the labour-power** market to press in the direction of a non-rise in the monetary wage above "the price of the labour-power". This part of the labour-force represents "the industrial reserve army which always pushes monetary wage downwards to correspond to the "price of production" of the labour-power. The members of the reserve army remain on the labour-power market as unemployment having the possibility of being recruited in a coming period witnessing an expantion in the production activity. They

are not excluded from the circle of the economic activity, and hence not excluded socially.[1]

It is vital to emphasis that Marx's theory of wages supposes the spontaneous operation of the objective laws governing the capitalist economic process; that is to say, it supposes the absence of a conscious action intervening in its operation. Here, it is a matter of the consciousness of the workers, their trade unions and political organizations, whose existence create the possibility of an intervention to limit the tendency, created by the existence of the industrial reserve army, towards a decline in the monetary wage.

2- <u>The theory of rent:</u>

Rent, which is what the landowner receives for letting "his" land, was the object of a debate that covered almost two centuries in the early history of political economy: from the fore-runners of the classical school, to its founders and their successors: from William Petty, Ricardo to Marx and. J.S.Mill. In this debate, "the economic rent" represented a part of the, economic surplus: the income of the landlord (i.e., its owner), after having representing all the economic surplus under the European feudalism, and even all the "produit net" of Francois Qnesnay. The landlord receives the rent because of his ownership of the land without paying any productive effort. In this sense, Smith say, that "the landlords love to reap where they never sowed". (p53)

[1] With the actual electronisation of the economic activities, existing labour-force becomes redundant: it exceeds the requirements of the process of capital accumulation. Here, the surplus of labour-force is excluded from the economic activity, for its members have no chance of a reemployment , and they are, hence, socially excluded, living on the margins of the society.

But, why rent is paid? We have seen that W. petty has tried to answer this question by presenting, in addition of the idea of the "absolute rent" that of the "differential rent", the later resulting from differences in the fertility of the cultivated lands or in the distance separating lands with the same fertility from the market of the agricultural commodities (given the fact that the length of the distance affects the cost of transport).

Ricardo reconsiders the question by the beginning of the 19th century at a time when the population pressure (evoked by the process of capital accumulation) and the wars of Napoleon have acted in the direction of a rise in the prices of the agricultural commodities (and especially corn) and a rise in the land rent.

For Ricardo, rent "is that part of the produce of earth which is paid to the landlord for the use of the original and indestructible powers of the soil" (p33). And, Ricardo makes the distinction between absolute rent and differential rent: the first is the income tied to the exploitation of land, paid to the landowner because "land is not unlimited in quantity" that is because the supply of land is constant. As for the differential rent it represents the difference between the income (of the landlord) tied to the exploitation of a certain land and the income tied the exploitation of another land with a lower productivity than that of the first (either because the soil is less fertile or because the land is farther from the market.) with the necessity of exploiting the second land for the satisfaction of the demand for agricultural products.

For Marx, rent is a part of surplus value produced in agricultural. It represents some thing over the average of surplus-value which the capitalist farmer excepts, like any other capitalist, to procure from the utilization of

his capital And this is because, while competition leads at the equalization of the rate of surplus-value in the different branches of production utilizing equal quantities of capital (as competition permits the transfer of capital from the branches of production with a lower rate of surplus-value to the branches with a higher rate, untill the equalisation takes place) the private property of land (which exists naturally in a limited area) precludes the free flow of capital in agriculture and the free transfer of the surplus-value from agriculture to the other economic activities. The existence of land in a limited area and the conditions of letting it to the farmers render difficult the flow of capitals in agriculture. It follows that the rate of surplus-value produced in agriculture surpasses that produced in the other branches of the economic activity.

But this does not mean that the excess in the surplus-value created in agriculture (in relation to the surplus-value created in other production branches) will go to the capitalist-farmer (who hires the land from its owner and uses wage labour in its cultivation for the realisation of money profit) but to the landlord given the monopoly which the landlords have over the agricultural land, a monopoly which enables them to appropriate the excess of surplus-value in the form of rent. This monopoly enables them to raise the rent every time the surplus-value created in agriculture increases (this means a diminution in the part of surplus-value kept for the agricultural capitalist in the form of profits). From here comes the contradiction between the class of landlords and the capitalist class in agriculture).

If this is the nature of rent in Marx's view, how rent is determined?

Disregarding the differs that exists between the different lands from the viewpoint of fertility and distance from the market, all the lands, including the worse, receive a minimum of rent as long as they are object of private property. Since, once we have a class owning the land, it is implied that the members of such class, i.e, the landlords, can determine the modality of the utilization of such land and that they would cede its utilitisation during a certain period for a counterpart. **This principle minimum which should be paid as a rent for all the lands is called the absolute rent.** It results from **the monopoly of land property. The amount paid as an absolute rent depends on the range of the availability of the agricultural land and the demand for agricultural products.** In the overpopulated countries, where no new land can be reclaimed for cultivation, the monopolist status of the landed class is fortified and the rent rises.

This absolute rent is appropriated by each land owner regardless the degree of fertility of the soil. The owner of the worst land does not obtain but this rent. But the owner of the more fertile land or of a land nearer to the market, obtains an additional rent, **called differential rent**, resulting from a **monopoly of utilitisation** of a land superior than other lands in the degree of fertility or the distance from the market. This is the monopoly of the capitalist enterprise existing on the agricultural land.

3- The theory of profit and interest:

The Classics took, usually, profit and interest together, given the fact that the dominant form of the capitalist enterprise was at their time implying the ownership by the capitalist of both the money capital used and the enterprise itself, besides the management of the enterprise by its owner.

This later fact has required a specific theoretical effort on behalf of the fore-the runners of the classics to distinguish profit, procured by the owner of the enterprise, from the income he receives for the task of management, which is a sort of wages. For Smith, the revenue derived from the stock (capital) by the owner who does not employ it himself, but lends it to another, is called the **interest** or the use of money. It is the compensation which the borrower pays to the lender, for the profit whose acquisition opportunity was provoked by the use of money". For Marx, the question is quite clear: The **interest** is obtained by the owner of loanable money capital, while the profit is the revenue obtained by the owner of the enterprise itself who has borrowed the money capital to build up the enterprise or to operate it.

As for the **source** of profit, Smith advances for profit the same argument advanced for rent. As rent proceeds from **the private property of land** (when land **becomes** private property), profit proceeds from **the private property of the stock** (ie. capital): as soon as stock has accumulated **in the hands of particular persons**, some of them will naturally employ it in setting to work industrial people (the workers), whom they will supply with materials and subsistence, in order to make **a profit** by the sale of their work, or by what their labour adds to the value of the materials". Like rent, profit represents for Smith "**a deduction** from the produce of labour employed" in production. Ricardo does not discuss the source of profit; he takes it for granted starting from the writings of Smith, to deal with the question of **how profit is determined**. For Marx, profit (and interest) is a part of surplus-value which represents the **immediate objective** of production in an economy where capital monopolies the property of the means of production, and hence the decions concerning the

utilisation of such means, the control over such utilization and the distribution of product accruing from their utilisation by the labour-force. And he does not take this as given, but studies the historical process by which capital has been formed to become the dominant phenomenon in the new economy with its negation, the wage labour.

Accordingly, the theory of profit (and interest) is not separated, for the Classics and Marx, form the theory of value (and the theory of wages). Profit (and interest) is determined, for the Classics by the level of the surplus and that of rent. **The rate of the effective profit gravitates with** the changes in the demand and supply which cause changes in the market prices of the produced commodities. This occurs in the short-run. If the rate of profit changes from one industry to the other, and changes, in the single industry, from time to time with the changes in the commodities market prices related to changes in the market forces in the short-run, it exists a "sort of average rate of profit (or the ordinary rate) regulated naturally" by the movement of capital from one industry to the other searching higher profits, and this continues until this average prevails in the long-run. A matter which presupposes the dominance of the competitive struggle between capitals which implies the freedom of shifting from one industry to other. In the very long-run, however, with the progress of capital accumulation and the intensification of the struggle between the working class and the capitalist class over the distribution of the net product, the rate of profit tends to fall.

For Marx, if the surplus-value represents a theoretical category arrived at at a high rate of abstraction, it is theoretically disintegrated, at a lower level of abstraction, to three elements: rent, profit and interest. The

rent is appropriated by the landlord, the profit by the proprietor of the enterprises, and the interest by the owner of the lounable money capital. The active capitalist (to be distinguished from the owner of the money capital who uses it negatively by lending it to others for an interest) arrives, thanks to his purchases of labour-power to be used with the means of production he owns, at gathering the conditions of production under which labour creates the surplus-value. This capitalist has to part with a part of surplus-value to the capitalist who lent him money-capital. He parts with another part of surplus-value to the landowner, as a rent. The profit represents what is remained for the **active** capitalist. Effectively, total capital is not affected at all, form the viewpoint of the distribution of the social product, when a part of capital is taking the form of money capital, since the surplus-value is distributed, after having ceded a part of it as a rent, between the two forms of capital: a part representing the interest and the other representing the profit. **Interest** is hence, what is paid for the use of money capital during a certain period. But, **how the interest is determined?** There is no simple answer to this question. It is clear that in the normal times of the capitalist economic activity the rate of interest should be lower than the rate of profit, if this later is used as a synonyms of surplus-value. Otherwise the "active" capitalist would not have any motive to borrow money capital. It could be said that in general. the rate of interest, should have a sort of relation with the average rate of profit, as it shows itself in the long-run; and that such relation depends on the demand of the "active" capitalists for money-capital and its supply effectuated by the capitalists owning money capital and not keen to employ it by themselves. It is important to add that the rate of interest paid by one single borrower might differ from the general rate of interest according to the loan

duration, the security offered by the borrower and the risk to which his economic activity is exposed.

We hope that it is clear now how from the theory of value between the Classics and Marx, the passage is made, through money, to the explanation of the market price. And from the theory of value emanates the concept of the economic surplus with the Classics and that of surplus-value with Marx to symbolize the revenues in which lie the social possibilities of saving (by keeping away a part of the social product from being consumed) which could be used in the expansion of the productive capacity during the next period to be employed by an additional labour force, which amounts to an increase in capital, i.e., an accumulation of capital. From the theory of distribution appears the social class, or classes which appropriate, thanks to its property of (or effective control on) the means of production, the incomes in which lie these saving possibilities, and can, hence, take the decisions of capital accumulation: from the production of the surplus (or the surplus-value) to its attribution to the class owning the means of production, to saving a part of such incomes, far from consumption, to the use of this part for the orientation of a part of the real product towards the future expansion of the productive capacity, we are in the very crux of the process of capital accumulation, the axe of the process of capitalist development. Before turning to its theory let use see the views of the Neo-classical school on the distribution of income.

The Neo-classical theory of income distribution

(The marginalist theory)

Adopting the same method of presentation we will attempt to see, through our reading of the Neo-classics writings:

- first, the general idea of their theory of distribution,
- second, the general methodology of their theory, and
- Third, their theories of income distribution.

I – <u>The general idea of distribution</u>:

The Neo-classical general idea of the distribution of income is elaborated as follows:

1- The pre-existence of a theory of exchange within which production is conceived as a technological phase in the exchange journey of the owner of the enterprise, the entrepreneur: a journey that starts from the markets of the "factors of production" to the market of the commodity to be sold, through a technological process in which the inputs are used to give an output (a product); the technological aspect is expressed by "the production function".

2- That the process of "production", as a phase in the exchange journey gathers the "owners of commodities available on their markets, "the factors of production, these owners are considered only as sellers, with no social belonging or any social specifity, they are all of the type of the "homos economicus".

3- That the individuals of the type "homo- economicus, divorced from whatever social structure, are **independent** owners of the "factors of

production", the latter being a purely neo-Classical term (it does not exist in the wittings of the Classics and Marx). Between them, the only economic relation which unites them is that they are "sellers" of the factors of production to the owner of a certain enterprise, on the markets of these "factors". Despite their "independence" they participate to a single technological process, transforming their "factors" into a product. They are gathered so that each "factor" effectuates a certain **"function"** in such process. Their combination is based, hence, on a **harmony**, and not a contradiction, between them. Since they are independent, with each of them as an owner of a "factor of production", furnishing a certain "service", each will have an **independent** and **immediate** source of **revenue** that would be different form the revenues of the others. We would not have, then, according to the Neo-Classics, a one and unique source for all revenues.

4- Starting from this way of conceiving "production", having been reduced to a technical conjunction between two acts of exchange, the shares of the owners of the "factors of production" are determined: wages for the workers, rent for the land owners, interest for the lender of money and profit for the owner of the enterprise, the entrepreneur.

5- The problem would be, hence, how the total income is distributed between the owners of the factors of production" taking each income separtly on the basis of the independence of each of the sources of incomes.

6- The pattern of distribution determines the money incomes of the owners of the "factors of production". Through the expenditure of these incomes, on light of prices dominating the markets, the share of the owners of each factors in the social product will be determined.

7- As for the determinants of the pattern of distribution, such pattern is determined, as a general rule, by the relative "productivity" of the "factors of production" which is determined "technically" without any real consideration of the effect of the process of decisions-making, which is the monopoly of the owner of the enterprise, or of the modality of their execution on such "productivities".

II- The general methodology of the theory of distribution:

The general theoretical approach for elaborating the theory of distribution is determined by a march in the opposite direction of that of the entrepreneur in his exchange journey:

1- From a theory of consumer's behavior founded on the idea of the utility for the individual of, the type of homo-economicus and a theory of the behavior of an individual entrepreneur, also of, the type homo-economicus, to a theory of the determination of the momental market price of the commodity.

2- This basic approach applies to all the commodities among which are the "services" of the "factors of production": offered by their owners on their markets and demanded by the entrepreneur because of their "productivity" in the technical process undertaken by him with the immediate objective of money profit maximisation. With the intersection of the equal forces of demand and supply in each of the markets of these commodities the momental market prices of the "factors of production" are determined.

3- Starting from the price of the unit of each factor of production and the quantity of the factor effectively demanded by all the entrepreneurs in return to its function as an input of production, the total money income received by the owners of this factor of production is determined. We are here in presence of the **functional distribution of incomes**, as

distinguished from **the personnel distribution**; the latter being the share a person receives from all the sources: (ex. as a landowner he receives a rent, being at the same time the owner of an enterprise he receives profit. The sum total of both represents his personal income).

4- Accordingly, the Neo-Classical theory of the distribution of incomes is presented through a theory of the prices of the factors of production on their markets, based on the demand for such factors according to the "productivity" of each factor.

This demand is a **derived demand**, derived from the demand of the consumers for the consumption commodities in whose production the factors of production, seen purely technically, are used (i.e., through the technical coefficients of the production of consumption commodities).

III- Theories of the distribution of income:

For the Neo-classics, to build up such theories, we need to have:

- First, a theory of prices of the factors of production,
- Second, the quantities of such factors used in the different branches of the economic process.

1- The demand for the factors of production:

The factors of production are demanded by the enterprises to be used as inputs in the production process. The demand for these factors has two characteristics:

a) It is, first, a derived demand, derived from the consumers' demand for the final commodities. For example, in the case of a machine which is used only for the production of textiles, if the demand for the textiles on the side of the consumers is absent, there would be no demand for the machine on

the side of the entrepreneur. And a big demand for the textiles would induce a big demand for the machine.

To this one can add that the derived demands get through stages whose number is determined by the no of stages between the primary product and the final consumer, ex. from the raw cotton to the yarn, to the textiles; to the clothes.

b) The second characteristics of the demand for the factors of production is that it is a **jointly interdependent demand.** The factors of production are used together, in the sense:

* That the demand for one factor pushes for the demand for the other factors: the demand for a certain sort of machine evokes the demand for the labour of those who can use such machine.

* That these factors are substitutes in their utilisation: the machine, e.g., can replace labour in the sense that it is possible to increase the number of machines and reduce the number of workers to produce the same quantity of output.

It follows that the utilisation of a certain factor of production depends not only on its price but also on the prices of the other factors, either because they are used with it, or because they can replace it in utilisation. **The demand** for all the **factors of production depends, hence,** on the prices of **all these factors, and not only on the price of the factor itself.** It follows that the cross elasticity of demand is not less important, in the case of the factors of production, than the direct elasticity. Like this, we can say that the demand for one of the factors of production depends, in general:

* On the demand for the commodity produced by the enterprise by using this factor.

* On the technical conditions of production within the enterprise, which influence the quantity to be demanded from each factor.

* On the price of this factor and the prices of the other factors.

In what follows we will see the demand of the enterprise and that of the industry for one factor of production, be it the labour, supposing that the demand for the commodity produced by the enterprise is given and that the price of the other factors of production are given also.

a) **The demand of the enterprise for the factor of labour**: the enterprise finds itself between two markets: the market of the product where it acts as a seller and the market of the factors of production, where it acts as a buyer of the inputs used in process of production. On the second sort of market, the enterprise demands the factors of production to employ them. These factors are demanded because they are productive. What matters is their **productivity**, i.e., what they add to the total product. From here comes the expressions of the demand for these factors in terms of units of productivity or product.

How the demand of the enterprise for a factor of production is determined?

To answer this question we start by emphasizing the assumption underlying the analytical image:

- It is assumed, first, that perfect competition reigns in the market of the product (the commodity produced) and in the market of the factor of production.

- It is assumed, second, that the demand concerns the factor which is the only variable one, i.e, that it is supposed that the other factors of production remain unchanged. This means that the action of the law diminishing returns is assumed.

- It is assumed, finally, that the unites of the considered factor of production are homogeneous, i.e. that they have all the same degree of efficiency.

We will deal, hence, with the demand of the enterprise (operating in a perfectly competitive market) for the factor labour And we have seen that the enterprise demands the factor because it is productive, i.e., realising a product: the enterprise does not interest itself except in the productivity of the factor, i.e., in what the factor adds to the total product; what is called **the marginal product of the factor.**

By the marginal product of the factor is meant the addition to the total product resulting form the employment of an additional unit of the factor, assuming that the other factors of production remain unchanged. The marginal product of labour, for example, is represented by the change in the total product (the quantity of textiles produced, e.g.) evoked by, the employment of one additional unit of labour (be it a new worker), supposing that the other inputs remain as they are.

This marginal product is called the **physical marginal product**. But the enterprise, aiming at the maximisation of his monetary profit, addresses its attention to what the additional unit of the factor adds to its (monetary) revenue. This necessitates to express the marginal product in value terms. The marginal product expressed in these terms is called the **marginal-revenue-product** of the factor of production. This represents the addition

to the total revenue of the enterprise resulting from the employment of an additional unit of the factor of production, all the other inputs remaining constant.

Effectively, to demand this additional unit of the factor of production the enterprise makes the comparison between the addition to its total revenue resulting from the employment of such unit and the cost of obtaining this unit. In other words, the enterprise makes the comparison between the marginal revenue-product and the marginal cost. The enterprise stops to buy additional units of the factor when the MRP of the factor becomes equal to its marginal cost (MC). This relation of equality represents the condition of the realisation of maximum profit.

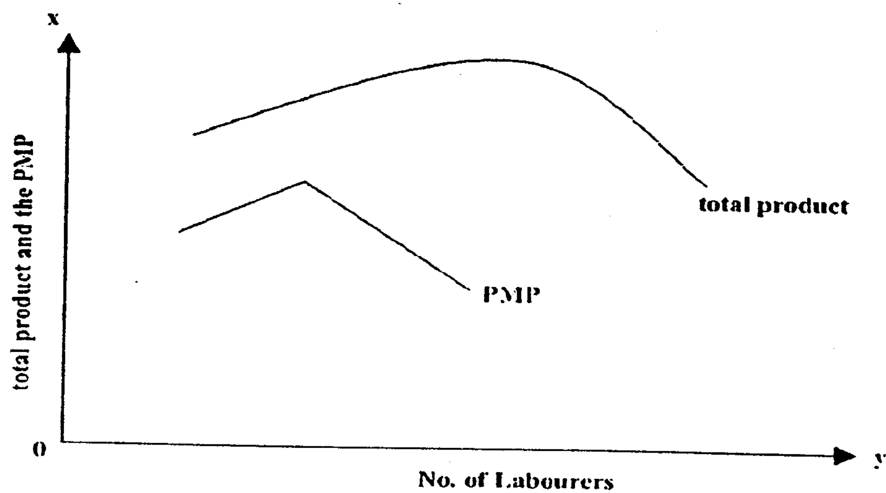
Accordingly, to determine the demand of the enterprise for the factor labour we have to see:

- first, the physical marginal product (PMP), and
- Second, the marginal revenue-product (MRP).

a) The physical marginal product: the gradual employment of additional units of the factor labour gives us a certain relation which could be expressed as follows: assuming that the other factor of production remain constant, the total product (expressed in terms of units of physical measure) increases, and with it the PMP, with the increase in the number of the employed labourers. This continues up till a certain point at which the PMP starts to diminish. We can express this relation numerically (by two hypothetical series) in a table that could be expressed graphically, as follows:

The table of the total product and the PMP

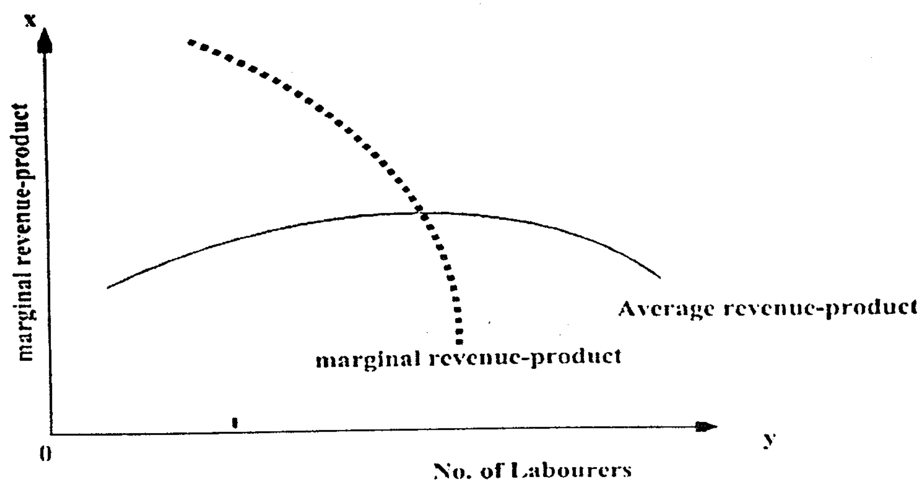
No. of Labourers	Total product measured in terms of units of physical measure	Physical marginal product measured in terms of units of physical measure
1	6	6
2	13	7
3	25	12
4	45	20
5	70	25
6	100	30
7	127	27
8	152	25
9	170	8
10	180	10



From the physical marginal product curve and on the basis that the price of the product is determined and given, we can have the curve of the marginal revenue-product (MRP) through the MRP table:

The table of the marginal revenue-product

No. of Laborers	physical marginal product	marginal revenue-product (PMP x the price of the unit of product, 30 pounds, e.g.)
1	6	30
2	7	35
3	12	60
4	20	100
5	25	125
6	30	150
7	27	135
8	25	125
9	18	90
10	10	50



But, a part of the addition to total revenue, resulting from the employment of additional units of labours, is attributed to the productivity of the other factors of production used with labour. (land, capital, etc.). To determine the contribution of labour, we have, then to make the distinction between:

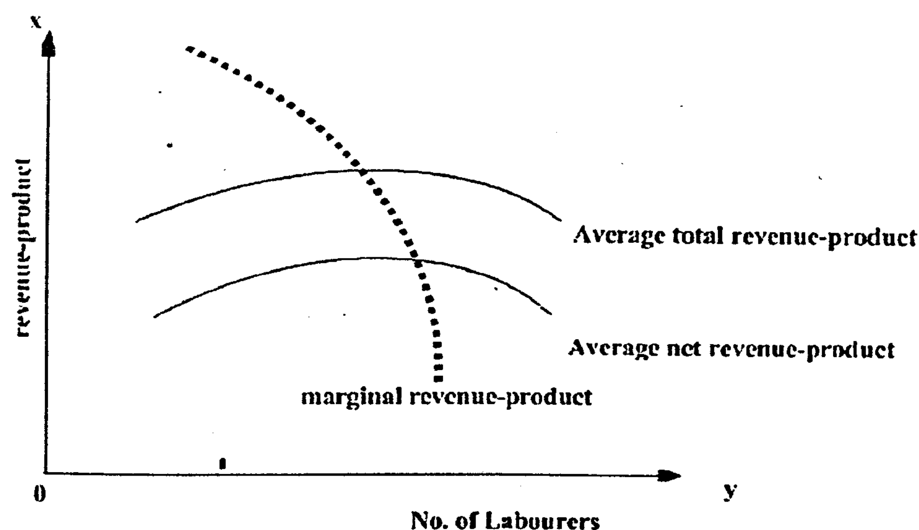
* the average **gross** revenue-product (AGRP), which is equal to the total revenue obtained at a certain level of employment of labour, divided by the number of employed labourers, and

* the average **net** revenue-product (ANRP), which is equal to total product obtained **from the contribution of labour**, divided by the number of employed labourers.

What we need for the construction of the theory of price for a factor of production are the curves of the average net revenue product and the marginal net revenue-product. To draw up these curves, we have two methods:

- either to consider the contribution of the other inputs (other than labour) as too little so that it can be ignored,
- Or, we consider such contribution as equal to the remunerations obtained by the other factors. In this case, to have the net revenue-product of labour at each of the levels of employment, we deduce from the total revenue what is paid as remunerations to the other factors of production (other than labour).

Using the second method we can draw up the curve of the average gross revenue-product and the curve of the average net revenue-product, for the factor labour, at each of the levels of employment, through the division of the gross total revenue and the net total revenue by the number of employed labourers.

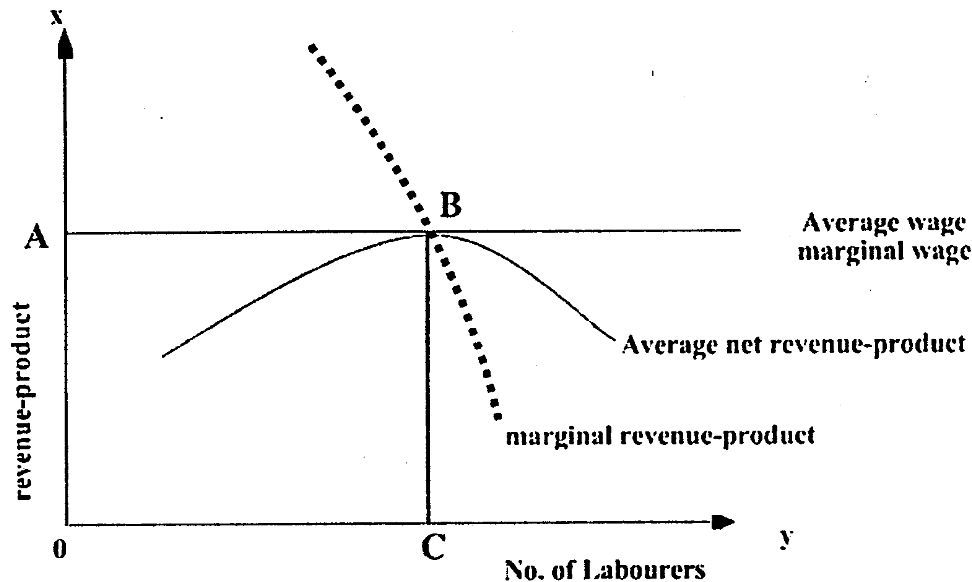


When we are dealing with a single variable factor of production, the other factors being constant, the marginal gross revenue-product will be equal to the marginal net revenue-product, for, when the quantities of the factors other than labour remain unchanged whatever is the level of production, the revenues of the enterprise do not change but with the changes in the quantity of the variable factor (labour, in our case).

We posses now the instruments used for the deduction of the demand of the enterprise for the factor labour, given the idea that the enterprise demands the additional unit of the factor for what it adds to its total revenue.

As we assume that the market of labour is perfectly competitive, the enterprise can buy any quantity of labour units without affecting the price prevailing in the market, the wage of labour. This is because the quantity of labour units bought by the enterprise, whatever its magnitude, is too small to have a considerable relative weight in the total demand for the factor labour, given the fact that a very big number of enterprises is demanding

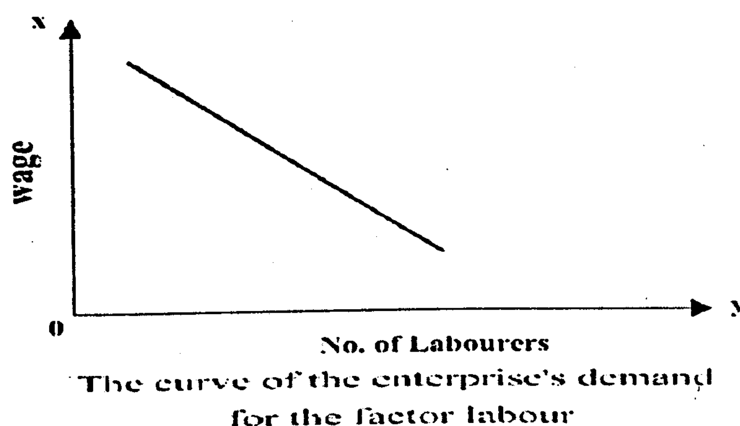
the factor. This means that the enterprise addresses itself to a supply of labour with an elasticity equal to infinity, the curve of such supply being, accordingly, a straight line parrarel to the y axe:



On this diagramme, O A represents the average wage which is equal, at the same time, to the marginal wage (given the perfectly competitive form of the labour market). The enterprise continues to buy additional units of labour as long as it adds to its total revenue more than the cost of buying it. The enterprise will be in equilibrium (realising the maximum profit or the minimum loss) where the marginal revenue-product for labour is equal to the marginal cost for the factor labour (which is the marginal wage, being at same time equal to the average wage on the competitive market of labour).

The equilibrium situation is represented on the diagramme by the point B, which denotes that the demand of the enterprise for the factor

labour is equal to the quantity O C of labour units when the wage of a labour unit is equal to O A. With the changes in wage we get different equilibrium situations and new quantities which the enterprise will be ready to buy at the different wage levels. We can express the relation between the series of quantities which the enterprise is ready to buy and the series of wage levels graphically where, the curve of the revenue-product represents the demand of the enterprise for the factor labour:



The curve of the enterprise's demand for the factor labour

b) – **The demand of the industry for labour**: If we add the equilibrium points of the different enterprises with respect to their demand for the factor labour it would be possible to shift to the equilibrium point for the industry to which these enterprises belong, and to get, hence, the industry's demand for labour. This shift could be done, methodologically, by the same way adopted to shift from the equilibrium of the firm to the equilibrium of the industry to find out the quantities of product produced by the enterprises and which they would be ready to offer on the market. The obtained curve of the demand of the industry will be sloping downwards to the right.

In a word, we can say that the factors determining the demand for a factor of production are:

* The demand for the commodity in the production of which the factors are used, the more elastic is such demand the more elastic will be the demand for the factors of production,
* The technical conditions of production which determine the marginal productivity of the factor of production,
* The relative importance of the cost of the factor of production in the total cost of production, and
* The possibility of substiting the considered factor by other factors.

In this way, the demand of the industry for the sort of labour it employs is derived. The supply of such sort of labour appears on the, labour-market in the form of a number of laborers ready to work for a number of hours daily, provided that they have the technical formation necessary for this sort of labour. This number of labourers represents the part of the labour-force addressed to this industry.

2- **The supply of factors of production:**

With respect to the supply of a factor of production, distinction should be made between:

- The supply of the considered factor in the national economy as a whole, and.
- The supply of such factor for a specific branch of activity, i.e. for an industry.

For the **supply of the factor of production in the national economy as a whole** many questions are raised: what are the factors determining the total supply of the factor of production? This supply, is it

contant or variable? If variable, what are the reasons of its change? What is the modality of its change? The answers to these questions require a detailed study which we cannot afford here. Meanwhile, a rapid glimpse on each of these factors to do may suffice for the purpose of our actual study:

By the total supply of labour (and it is more precise to talk about the supply of labour-power, but this would not fit in the neo-classical jargon) it is meant the total of the labour hours the whole of the population is ready to offer. And the supply of effort would be the function of the volume of the population in general, the volume of the active population (i.e, at the age of work), the part of active population ready to work and the number of labour hours the individual labourers are ready to work daily. Such are the factors which determine the supply of labour in the national economy as a whole. Each of these factors is determined in its turn, by a number of determinants: the labour force, e.g. is determined by the age structure of the population (which shows the number of those at the work age), by the degree of the women participation to work outside the household, by the demand for labour and the preference of the individual to leasure.

By **land** as a factor of production it is meant not only land in the linguistic sense but also all the other national resources that could be used in the process of production. For agricultural land, its supply cannot be inelastic: the soil deteriorates if it is not maintained, and in this case the supply of land diminishes. We can reclame more land converting it into cultivable land. Furthermore; the process of land reclamation itself becomes different and less costly by the application of the techniques of genetics engineering in agriculture. In all these cases, the supply of land can expand.

As for the **concept of national resources** in general, it is important to put in mind that the concept has a meaning only in relation to a certain level of development of the scientific and technological knowledge (the later being related to the possibility of using the scientific knowledge in the solution of the problems of the material life) which enables man to secure a degree or another of control over nature. What could be considered as a natural resource at a certain moment depends on the knowledge acquired by man concerning its characteristics and the possibilities of its utilization in the economic activity: coal, e.g, was not considered as a natural resource until its characteristics and uses were discovered by man. And, it can stop to be a natural resource, if man abandons its use, for environment motives, and hift to a non polluting source of energy such as electricity or solar and thermal energies.

Capital is, for the Neo-classics, a thing represented by the means of production. it is like this a man-made factor. Its supply is constituted by the stock of machines, equipments, buildings, roads, bridges ....etc. This supply diminishs by the amount of capital depreciated through the use of capital during a certain production-period, for a certain element of physical capital could be exhausted, partially or totally, during the production process with its specific time dimension. Accordingly, during each period of production, a certain percentage of the physical capital is depreciated according to the average technical age of the assets and the degree of intensity of its utilization (and the sort of maintenance it receives). This is what is called **the depreciation of capital**, which reduces the existing stock of capital and hence its supply. On the other hand, the supply of capital increases by the construction of new productive capacity, the expenditure on which is called **real investment**. In real terms, it takes place

by employing a part of the labour force (using some means of production) not in the production of consumption goods, but in the creation of an additional productive capacity to be used in the current production during a coming period. We are here in presence of an expansion of the productive capacity of the economy. Looked at in monetary terms, investment cannot take place unless preceded by an act of saving: to keep a part of the money income far from consumption expenditure, to be used, at a later time, for the purchase of labour-power and means of production to be mobilised for the construction of the new productive capacity. From both the real and monetary viewpoints real intrestment presupposes real and monetary saving. Finally, we notice that the supply of capital tends to follow, in the capitalist society, a descending tendency through the **process of capital accumulation**, sometimes gradually and sometimes abruptly, with its ups and downs over time.

All this is for the supply of factors of production in the economy as a whole. **As for the supply of the factor for a certain branch of production**, this supply depends on the price paid for such factor. If it happens that a certain factor of production is used in a number of branches of production, the owners of such factor would look for the branch of production where they can get the highest of remunerations for the sale of their factor. This gives **the factor of production a certain mobility which affects the elasticity of its supply**. Such mobility is determined:

* by the sensibility which the factor of production has with respect to pecuniary remunerations. This mobility is determined too by other factors among which are the degree of the workers familial or domiciliary ties which can prevent the worker from leaving a work near the family or the domicile to another work even when the latter's wage is higher,

* the mobility of the factor of production is determined, secondly, by the existence or the absence of factors weakening the conditions of competitions on the market . In general, the mobility of the factors of diminish with the degree of absence of the conditions of perfect competition. Monopoly, e.g, prevents new capitals from entering the market. This means that the mobility of capital is highly reduced under such form of market. Likewise, the absence of information on the workers' side about the new employment outlets in the other corner of the vast national market reduces the awareness of the workers of such outlets (which might imply better conditions of work) and reduces, hence, their mobility between the regions of the national economy.

Thanks to the mobility of the factors of production, the remuneration of a single factor tends to be more or less the same, under the conditions of perfect competition, in the different branches of production employing this factor. If movement is possible, the owners of the factor of production will move from the branch where the price of the factor is relatively low (the supply of the factor for this branch will decline and its price would rise at a later stage, supposing that the demand for the factor of production remains unchanged) to the branch of activity where the price of the factor of production is higher (its supply will be increasing, and its price declining at a later stage, assuming that it demand remains constant). The movement would continue until the remuneration of the factor of production becomes more or less the same in the different branches of production employing it.

We hope now that it is clear that the prices of the factors of production are determined, according to the Neo-Classics, by the intersection of the forces of the demand for these factors by the

enterprises and the force of their supply by their owners. Behind the demand lies the productivity of the factors, and especially the marginal productivity (for those who carry out their inference on the margin). Behind the supply lies the pain (or the disutility) supported by the owners of the factors of production. Meanwhile, we have seen that there exist objective factors determining the supply of each of the factors of production, in the national economy as a whole and with respect to a branch, or some branches, of production.

It is obvious that the Neo-classics have drawn their general logic of the determination of the distribution of the national income between the owners of the factors of production "from their theory of the determination of the market price, in general. Having acquainted ourselves with such logic and its use in the determination of the prices of factors of production, we turn now to see the essence of what such school of thought presents with respect to each of the "factors of production".

III- **The Neo-classical theories of income distribution:**

In confrontation with the theory of labour value, the Neo-Classics apply their general logic starting from a basis we have already seen, representing what they consider the basis of income distribution in the capitalist economy. The essence of such idea, and it is important to recall it, is that we are in presence of **four "factors of production"**, each of them is **independent** from the others: nature, labour, capital and entrepreneurship.

These factors are independent in the sense that the existence of one does not depend on that of the others. Despite their independence they **cooperate** through the participation to production: this corporation means

the absence of conflict, of contradictions. Each of them is, independently, an **immediate source of one of the incomes**: nature gives the rent, labour gives the wages; capital gives the interest and the entrepreneurships gives the profit. The monetary income has, hence, **four sources and not a single source,** these are the "factors of production" Accordingly, they have all their social justifiability, with no favors to any of them vis-à-vis the others. And if we are to talk about favour at all, it is to be attributed to the entrepreneur, the "patron" of production, conceived technologically.

1- The theory of wages:

We have seen that the wage is the price of labour-power, that is the price paid for the purchase of one unit of labour-power as a commodity. It is determined in the labour market in the same manner as that of the determination of the prices of the final consumption goods on their markets. As for the demand for labour, we have seen that it is determined, for the Neo-classics, according to what their theory of marginal productivity announces. The basic idea is that the demand for the factor labour is determined by the marginal productivity of labour. Such idea is completed by that of Alfred Marshall related to this theory, which implies that the wages do not represent an exception on the general principle: they also are determined by the simultaneous action of the forces of demand and supply.

2- The theory of profit and interest:

For the Neo-Classics, the interest is determined starting from the theory of marginal productivity which determines the share of the factor of production by the "conditions" of the supply of the factor and its demand.

As labour receives wages, capital receives "interest" for its participation to production, and **profit becomes one of the forms of interest (a specific form)".**

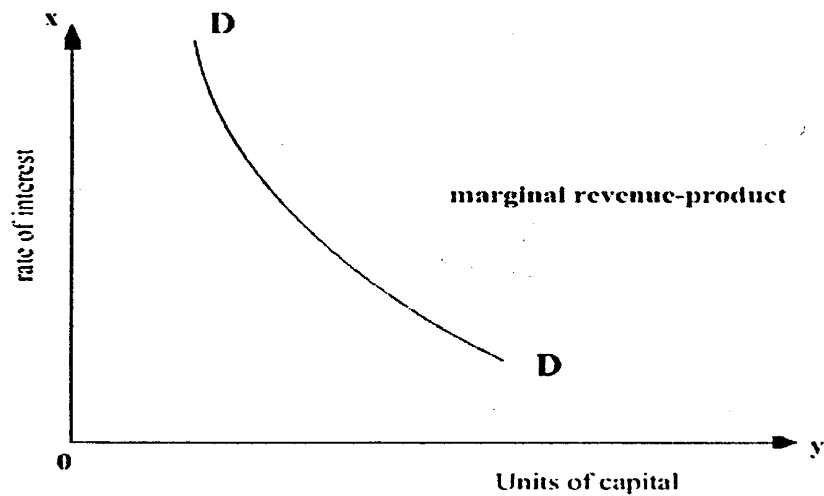
Interest is, for the Neo-classics, hence, the remuneration of capital as a factor of production. But, why the interest is paid? Because the individual capitalist **abstains** from the expenditure of his income (or a part of it) on the purchase of consumption goods in the present time, an abstenance which produces savings which could be consactrated to the expansion of the productive capacity, and interest is, then, the price of the abstenance.

(This presupposes that the income of the capitalist is too little to allow him to increase, at the same time, his consumption and his saving, an assumption far from reality). And profit? It is the remuneration of some of the risks of production against which no insurance can be made.

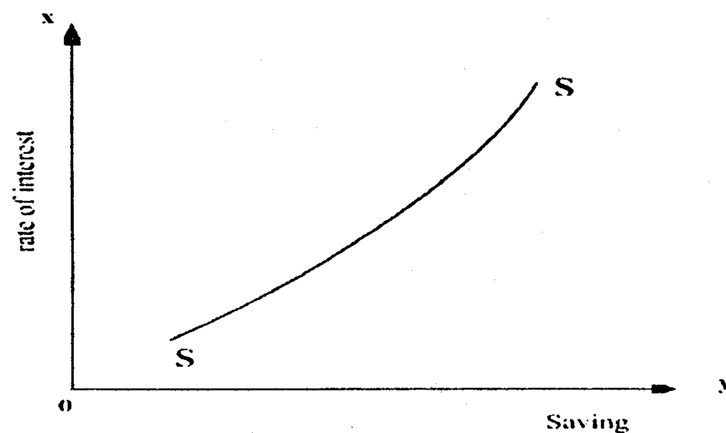
Starting from this idea, we find, within the Neo-classical theories of distribution, a number of theories of interest. Let us see, without details, such theories, to finish with a word on profit:

a) The **first** theory elaborated by **A. Marshall is called the pure theory of interest.** It considers capital as a factor participating, with the other factors, to production. The rate of interest, the remuneration obtained by this factor in the long-run, is determined by the two forces which determine all prices: the demand and the supply, the demand for capital and the supply of capital, **looked at from the real viewpoint, as material units of means of production.** The rate of interest tends to the equilibrium point where the market demand for capital will be equal to the total capital available on the market. Behind the demand for capital lies its productivity. Inference is

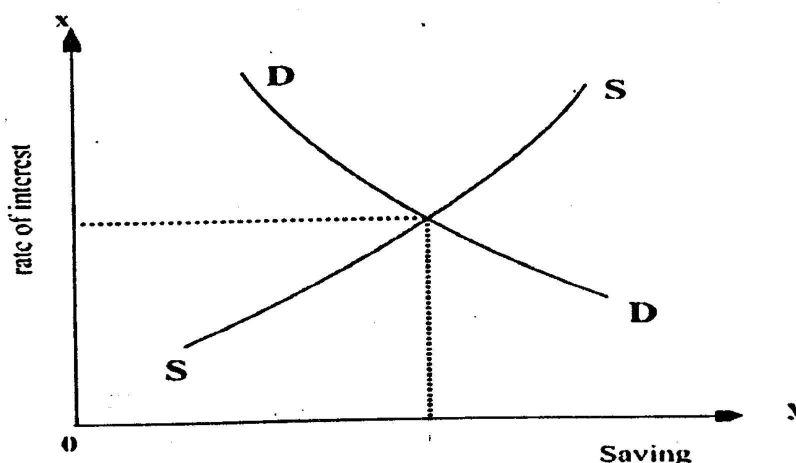
made by using marginal units. Hence, the interest is the marginal productivity of capital. The total demand for capital is represented by total investment:



Behind the supply of capital lies the cost of producing of capital assets. This supply finds its final source, in the last resort analysis, in the total saving resulting from "abstenance". This saving is in its turn, the function of the rate of interest:



The rate of interest is determined, at the equilibrium situation, by the intersection of the curve of the demand for capital (investment) and the curve of supply (saving). In the long-run, the equilibrium will be where the determinated rate of interest equalises between investment and saving:



We have, **secondly, the theory of interest of the Swedish school** (K. Wicksell, 1851-1926 and G. Myndal 1898 – 1987 and others). And the British economist D. Robertson. For them, **interest is a monetary phenomenon, having to do, in the first place, with the liquid assets loanable for investment purposes.** From here, comes the name given to this theory as the "**theory of loanable funds**". The partisans of this theory hold that there is no market for saving. And in the absence of such market, there would not be a price for saving. Accordingly, the rate of interest cannot be determined starting from the demand for saving and the supply of saving. Instead of that, we have a market for **credit** (that is to cede the utility of money for a certain time for an interest paid to the lender). On such market, we find a demand for the loanable liquid assets (for investment purposes) and a supply of these assets. The price of credit, the

rate of interest, is determined by the demand for and the supply of these liquid assets.

The **third** theory of interest is that **the Keynesian theory** (J.M.Keynes, 1883-1946), which considers **interest as a pure monetary phenomenon**, since it is determined by the demand for money (through the liquidity preference) and the supply of money. Such theory is studied usually in the domain of the monetary economy. That is why we limit ourselves here to the main idea:

* The rate of interest is determined on the monetary market by the forces of the demand for money and the supply of money; (money in general and not the loanable liquid assets only).

* behind the demand for money (as cash money) lies the liquidity preference, that is the preference of the individuals to hold money in its cash form. This preference for money as a liquid asset is motivated by three motives:

- The transactions motive according to which the individuals have the preference for cash money to meet the daily transactions within the household or within the enterprise).

- The precautionary motive, according to which the individuals tend to hold liquid money to face unexpected matters, an emergency (an accident, an abrupt illness, etc).

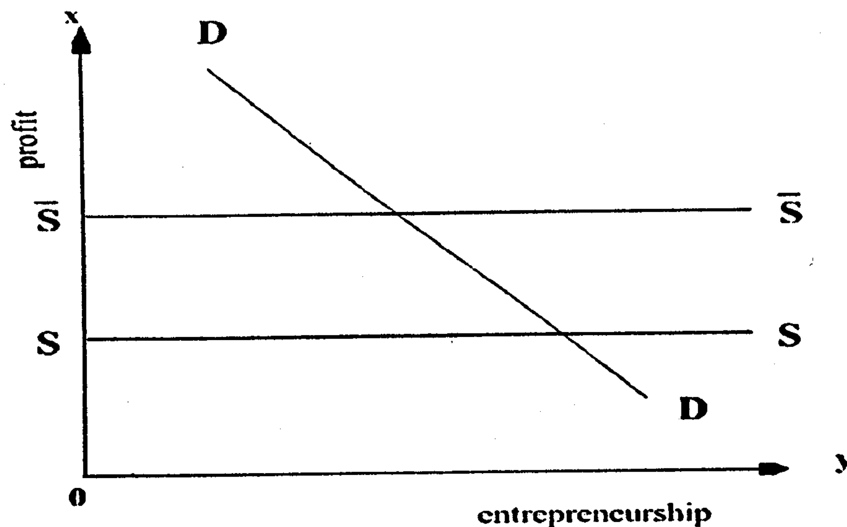
- The speculation motive: the need for liquid money to seize the occasions on the markets, especially the financial market, to carry out speculative transactions.

* The supply of money on the monetary market is determined through the action of the monetary institutions, private as well as public.

* The rate of interest on the market would be the function of the intersection of the demand for money and its supply.

As for **profit,** which the Neo-classics consider as the remuneration for the entrepreneurship as a factor of production, its rate is determined by the demand for, and the supply of, such factor. The entrepreneurship which implies the ownership of the enterprise is represented by the process of making the decisions of investment, production, and prices. It is considered as a factor of production, with a difference between it and the other factors: while the other factors of production could be hired or brought, the entrepreneurship is excepted from that.

Considered in the way, the entrepreneurship will have a marginal revenue-product which determines the demand for it. The supply will be determined by the quantity available of that factor. Such supply is characterized by being almost inelastic. The price of the factor entrepreneurship, the rate of profit, is determined by the intersection of its demand curve and its supply curve:



3- **<u>The theory of the rent:</u>**

As we have seen, the rent, which represents the part of the social product appropriated by the landowner, has been the object of a long debate for about two centuries: from W. petty to Marx and J.S.MILL, through, of course, the Classics. The outcome of such debate was, as mentioned before, the elaboration of a theory of distribution between the Classics and Marx.

For the Neo-classics, the idea of the rent is extended to cover all what is paid to the factors of production whose supply is inelastic. The most important example of these factors is land. Since rent is paid because of the scarcity of land which exists with a supply mostly inelastic. And, it is paid even in the case where the pieces of land are homogeneous (from the viewpoint of the fertility or the distance from the market). The difference between the pieces of land does not explain the rent; it only evokes differences in the rent paid for the lands having differences between them.

If it is said that the rent is what is paid to the factor of production with an inelastic supply, the rent stops, in the eyes of the Neo-classics, to be a phenomenon belonging to the agricultural domain only. The land rent becomes a simple example which clarifies, with other examples, the existence of sorts of the **economic rent**, paid to all the factors of production (when their supply is inelastic).

Accordingly, **the rent becomes a phenomenon attributed to the inelasticity of the supply of one of the factors of production in relation to its price.** This inelasticity appears whenever some of the factors of production are either irreproducible at all or reproducible within limits. The rent is attributed hence, to the characteristics of the position of a certain commodity on the market, and not the expression of a social relation between the members of the society which takes place by the intermediary of things.

Starting from this way of conceiving rent, A. Marshall introduces the idea of the **quasi-rent**, by which he means the rent attributed to the inelasticity of the supply of the factor of production in relation to its price when such inelasticity is due to the non-responsiveness of supply **in the short-run** (assuming that in the long-run the supply will respond to the change in the price of the factor and becomes elastic). Is considered so the quasi-rent received by a labourer enjoying a sort of a technical formation rarely formed on the market (since such formation requires a long period for its realisation). It is the same with the quasi-rent acquired by the producer of machines the demand for which is intensified in the short-run; and so on.

* * * *

Having seen the essence of the neo-classical theories of the different sorts of income related to the capitalist economy, we come to the end of the theory of income distribution of the Neo-classics, based on a theory of formation of the market prices of the "factors of production", a theory which is considered as a special case of their theory of the market price formation. With this, our study of the different theories of income distribution in the capitalist society is achieved

Selected Bibliography

1- Political Economy in General.

A. The basic works:

KALECKI M., *Theory of Economic Dynamics*, Unwin University Books, London, 1965.
— *Selected Essays and the Dynamics of the Capitalist Economy, 1933-1970*, Cambridge University Press, 1971.
KAMERSCHEN D. R., *Reading in Microeconomics*, John Wiley and Sons, New York, 1969.
KEYNES J. M., *The General Theory of Employment, Interest and Money*, Macmillan, London, 1936. En français, chez Payot, Paris, 1942.
KLEIN R. L., *The Keynesian Revolution*, Macmillan, New York, 1948.
LANGE O., *The Theory of Reproduction and Accumulation*, P.W.N., Varsovie, 1969.
LEVENSTONE A. and SOLON B., *Outline of Price Theory*, Holt, Rinchart and Wiston, New York, 1964.
MARCHAL J. and LECAILLON J., *Les Flux monétaires*, Editions Cujas, Paris, 1948.
MATTICK P., *Marx et Keynes, les limites de l'économie mixte*, Gallimard, Paris, 1972.
MEEK R. L., *Studies in the Labour Theory of Value*, Lawrence and Wishart, London, 1956.
— *Economics and Ideology and Other Essays*, Chapman and Hall, London, 1967.
NAGELS J., *La Reproduction du capital selon K. Marx, Boisguillebert, Quesnay, Leontiev*, Université libre de Bruxelles, Institut de sociologie, 1970.
PARETO V., *Manuel d'économie politique (1909)*, Droz, 1956.
PERROUX F., *Le Néo-Marginalisme*, Domat-Montchrestien, 1945.
PIROU G., *L'Utilité marginale de C. Menger à J. B. Clark*, Paris, 1938.
Readings in Price Theory, American Economic Association Series, G. Allen and Unwin, London, 1953.
Readings in the Theory of Income Distribution, American Economic Association Series, G. Allen and Unwin, London, 1950.
ROBINSON J., *The Economics of Imperfect Competition*, MacMillan, London, 1954.
— *Introduction à la théorie de l'emploi*, traduction de Jacques Delons, P.U.F., 1948.
ROBERTSON D. H., *Lectures on Economic Principles*, 3 vol., Staples Press, London, 1957.
SINGH V. B. (ed.), *Keynesian Economics : A Symposium*, People Publishing House, New Delhi, 1956.
STIGLER G., *The Theory of Price*, MacMillan, New York, 1952.
STONIER A. and HAGNE D., *A Textbook of Economic Theory*, Longmans, London, 1957.
SWEEZY P. (ed.), with Böhm-Bawerk and Hilferding, *Critic of Marxist Economic Theory*, New York, 1949.
— *Theory of Capitalist Development*, Monthly Review, New York, 1956.
TSURU S. (ed.), *Has Capitalism Changed ?*, Iwanami Shoten Publishers, Tokyo, 1961.
WILLIAMS J. H., *An Appraisal of Keynesian Economics*, The American Economic Review, Papers and Proceedings, may 1948, p. 273-290.

KRUPP S. R. (ed.), *The Structure of Economic Science : Essays on Methodology*, Prentice-Hall, London, 1966.
MARCHAL E., *Méthode scientifique et Science économique*, 2 vol., Genin, Paris, 1952 à 1955.
NOGARO B., *La Méthode en économie politique*, Paris, 1950.
SCHUMPETER J., *Economic Doctrine and Method*, Allen and Unwin, London, 1954.

II. - Political Economy and Capitalism

ANDREWS P. W. S., *On Competition in Economic Theory*, Macmillan, London, 1966.

ANSOFF H. I. (ed.), *Business Strategy, Selected Readings*, Penguin Books, London, 1969.

ASH P., *Economic Theory and the Antitrust Dilemna*, J. Wiley and Sons, New York, 1970.

BAIN J., *Pricing, Distribution and Employment*, Holt, Rinchart and Winston, New York, 1960.

BARRÈRE A., *Théorie économique et Impulsion keynésienne*, Dalloz, Paris, 1954.

BOUKHARINE N., *L'Economic politique du rentier*, E.D.I., Paris, 1967.

BOULDING K., *Economic Analysis*, Hamish Hamilton, London, 1955.

BRADY R. A., *Business as a System of Power*, Columbia University Press, 1951.

BRAFF A. J., *Macro-Economic Analysis*, J. Wiley and Sons, New York, 1961.

CHAMBERLAIN E., *The Theory of Monopolistic Competition*, Harvard University Press, Cambridge Mass, 1956.

COONTZ S. H., *Productive Labour and Effective Demand*, Routledge and Kegan Paul, London, 1965.

DILLARD D., *The Economics of J. M. Keynes*, Crosby Lockwood and Sons. London, 1956.

DOBB M., *Wages*, Cambridge University Press, 1957.

— *Political Economy and Capitalism*, Routledge and Kegan Paul, London, 1953.

EDWARDS R. C., REICH M. and WEISKOFF (eds.), *The Capitalist System*, New York, 1972.

FRANKEL H., *Capitalist Society and Modern Sociology*, Lawrence and Wishart, London, 1970.

GRAYSON H., *Price Theory in a Changing Economy*, Macmillan, New York, 1965.

HANSEN A. *A Guide to Keynes*, McGraw-Hill, New York, 1953. En français chez Dunod.

HARRIS S. E. (ed.), *The New Economics*, Alfred A. Knopf, New York, 1947.

HOROWITZ D. (ed), *Marx and Modern Economics*, Monthly Review, New York, 1968.

HUNT E. K. and SCHWARTZ J. G. (eds.), *A Critic of Economic Theory*, Penguin Books, London, 1972.

HUNTER A. (ed.), *Monopoly and Competition*, Selected Readings, Penguin Books, London, 1969.

III. - Political Economy and Socialism

BARAN P.. « National Economic Planning », *Survey of Contemporary Economics*, Haley B. F. (ed.), Honnewood, Illinois, 1952, p. 355-407.

BETTELHEIM Ch., *Les Cadres socio-économiques et l'Organisation de la planification socialiste*, Centre d'études de planification socialiste, Sorbonne, Paris, 1965.

— *Problèmes théoriques et pratiques de la planification*, Maspero, Paris, 1956.

— *La Transition vers l'économie socialiste*, Maspero, 1968.

— *Calcul économique et Formes de propriété*, Maspero, 1970.

— *Révolution culturelle et Organisation industrielle en Chine*, Maspero, 1973.

BETTELHEIM Ch. et SWEEZY P., *Lettres sur quelques problèmes actuels du socialisme*, Maspero, Paris, 1972.

BOBROWSKI C., *La Formation du système soviétique de planification*, Mouton and Cie, Paris-La Haye, 1956.

BRODY A., *Proportions, Prices and Planning*, North-Holland Publishing Cie, Amsterdam, 1970.

BRUS W., *Problèmes fondamentaux du fonctionnement de l'économie socialiste*, Maspero, 1968.

CAIRE G., *La Planification*, Editions Cujas, Paris, 1967.

DOBB M., *On Economic Theory and Socialism*, Routledge and Kegan Paul, London, 1955.

— *An Essay on Economic Growth and Planning*, Routledge and Kegan Paul, London, 1960.

— *Welfare Economics and the Economics of Socialism*, Cambridge University Press, 1969.

— *Socialist Planning : Some Problems*, Lawrence and Wishart, London, 1970.

DOWIDAR M., *Les Schémas de reproduction et la Méthodologie de la planification socialiste*, Editions Tiers Monde, Alger, 1964.

FEINSTEIN C. H. (ed.), *Socialism, Capitalism and Economic Growth*, Cambridge, University Press, 1967.

I.S.E.A. (Cahiers de), *Planification et Analyse économique*, G 20, n° 150, juin 1964.

KALECKI M.. *Théorie de la croissance en économie socialiste*, Sirey, Paris, 1970.

KÖHLER H., *Welfare and Planning : An Analysis of Capitalism versus Socialism*, J. Wiley and Sons, New York, 1966.

LANGE O. (ed.), *Planification et Analyse économique*, G 20, n° 150, juin 1964.

LANGE O. and TAYLOR F. M., *On the Economic Theory of Socialism*, The University of Minnesota Press, Minneapolis, 2nd Printing, 1948.

MACCIOCHI M. A., *De la Chine*, Seuil, Paris, 1971.

MARCZEWSKI J., *Planification et Croissance économique des démocraties populaires*, 2 tomes, P.U.F., 1955-1956.

MYRDAL J., *Un village de la Chine populaire*, Gallimard, Paris, 1972.

NIKITINE, *Economie politique*, Moscou, 1964.

NOVE A. and ZAUBERMAN A. (eds.), *Studies on the Theory of Reproduction and Prices*, P.W.N., Varsovie, 1964.

SWEEZY P., *Socialism*, McGraw-Hill, New York, 1949.

ZAUBERMAN A., *Aspects of Planometrics*, University of London, The Atlone Press, 1967.

IV. - Quantitative analysis

BREMS H., *Quantitative Economic Theory : A Synthetic Approach*, J. Wiley and Sons, New York, 1968.
CHENERY H. and CLARK P., *Interindustry Economics*, Wiley and Sons, New York, 1969.
DOREMAN R., SAMUELSON P. and SOLOW R., *Linear Programming and Economic Analysis*, McGraw-Hill, New York, 1958. En français, chez Dunod, Paris, 1962.
DOWIDAR M., *Les Schémas de reproduction et la Méthodologie de la planification socialiste*, Editions Tiers Monde, Alger, 1964.
FRISCH R., *Principes de programmation linéaire*, Oslo, 1954.
GUITTON H., *Statistique et Econométrie*, Dalloz, 1959.
HADLEY G., *Linear Programming*, Addison-Wesley, Reading, Mass., 1962.
Input-Output Analysis : An Appraisal, Studies in Income and Wealth, vol. 18, Princeton University Press, 1955.
KOOPMANS J. C., *Three Essays on the State of Economic Science*, McGraw-Hill, New York, 1957.
— (ed.), *Activity Analysis of Production and Allocation*, J. Wiley and Sons, New York, 1962.
KORNAY J., *Mathematical Planning of Structural Decisions*, North-Holland Publishing House, Amsterdam, 1967.
LANGE O., *Introduction to Econometrics*, Varsovie, 1960.
LEONTIEF W., *The Structure of the American Economy, 1919-1929*, 2nd edition, Oxford University Press, New York, 1950. En français, chez Génin, 1958.
MALINVAUD E., *Initiation à la comptabilité nationale*, I.N.S.E.E., 3e édition, 1964.
MARCHAL J., *Comptabilité nationale française*, Editions Cujas, 4e édition, 1966.
MARCZEWSKI J., *The Income of Nations : Theory, Measurement and Analysis, Past and Present*, New York University Press, 1968.
SOLOW R. M., DOREMAN R. and SAMUELSON P., *Linear Programming and Economis Analysis*, MacGraw-Hill, New York, 1958.
TINBERGEN J., *Econometrics*, Allen and Unwin, London, 1951. En français, chez A. Colin, Paris, 1954.

Contents

Page

el Fat'h Printing
Behind 44 Soter St., Alexandria
Fax: 4840664 Tel. 4870203 /4